

CATALOGUE OF GALAXIES  
AND OF  
CLUSTERS OF GALAXIES

VOLUME III

F. ZWICKY   E. HERZOG



CATALOGUE OF GALAXIES  
AND OF  
CLUSTERS OF GALAXIES

prepared by

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Volume III

covering the Palomar survey fields  
of the declination zones  $+36^{\circ}$ ,  $+42^{\circ}$ ,  $+48^{\circ}$ ,  $+54^{\circ}$   
between  $5^{\text{h}}30^{\text{m}}$  and  $20^{\text{h}}00^{\text{m}}$  in right ascension



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CONTENTS



FIELDS OF SURVEY ZONE  $+36^{\circ}$

FIELD	Survey Plate	Center of Field 1950.0				L. A. U. Galactic Coordinates				Page
No.	No.	$\alpha$		$\delta$		$\lambda$		$\beta$	No.	
		h	m	o	'	o	'	o	'	
174	942	6	10	+	36 00	176	44	+	8 34	2
175	1268	6	38	+	36 00	179	16	+	13 39	4
176	889	7	06	+	36 00	181	30	+	18 53	6
177	1336	7	34	+	35 30	184	00	+	24 06	10
178	989	8	02	+	35 30	185	45	+	29 35	14
179	648	8	30	+	35 30	187	13	+	35 08	18
180	1342	8	58	+	35 30	188	22	+	40 46	22
181	925	9	26	+	35 30	189	10	+	46 26	26
182	1345	9	54	+	35 30	189	29	+	52 08	30
183	1032	10	22	+	35 30	189	09	+	57 49	34
184	731	10	49	+	35 30	187	51	+	63 17	38
185	695	11	17	+	35 30	184	47	+	68 50	42
186	109	11	45	+	35 30	178	18	+	74 10	48
187	1599	12	13	+	35 30	164	12	+	78 51	52
188	105	12	41	+	35 30	134	23	+	81 43	56
189	110	13	08	+	35 30	97	38	+	80 57	60
190	116	13	36	+	35 30	74	54	+	77 08	64
191	106	14	04	+	35 30	64	34	+	72 07	68
192	127	14	32	+	35 30	59	44	+	66 40	72
193	1610	15	00	+	35 30	57	28	+	61 04	76
194	107	15	28	+	35 30	56	36	+	55 23	80
195	71	15	56	+	35 30	56	35	+	49 41	82
196	1093	16	23	+	36 00	57	48	+	44 15	84
197	1069	16	51	+	36 00	58	41	+	38 37	88
198	1132	17	19	+	36 00	59	55	+	33 03	92
199	277	17	47	+	36 00	61	27	+	27 33	96
200	197	18	15	+	36 00	63	16	+	22 08	100
201	148	18	43	+	36 00	65	21	+	16 49	102
202	1434	19	11	+	36 00	67	42	+	11 38	106



# FIELDS OF SURVEY ZONE $+42^{\circ}$

FIELD No.	Survey Plate No.	Center of Field 1950.0		I. A. U. Galactic Coordinates		Page No.
		$\alpha$	$\delta$	$\lambda$	$\beta$	
		h m	o ' "	o ' "	o ' "	
203	669	6 07	+ 42 00	171 04	+ 10 49	108
204	696	6 37	+ 42 00	173 29	+ 15 52	110
205	988	7 07	+ 42 00	175 34	+ 21 05	112
206	701	7 36	+ 41 30	177 45	+ 26 08	116
207	1329	8 06	+ 41 30	179 08	+ 31 37	120
208	707	8 36	+ 41 30	180 04	+ 37 10	124
209	721	9 06	+ 41 30	180 30	+ 42 47	128
210	661	9 36	+ 41 30	180 18	+ 48 24	132
211	711	10 06	+ 41 30	179 13	+ 54 01	136
212	690	10 36	+ 41 30	176 51	+ 59 26	140
213	1349	11 05	+ 41 30	172 42	+ 64 30	144
214	719	11 35	+ 41 30	165 16	+ 69 19	148
215	1367	12 05	+ 41 30	152 46	+ 73 16	152
216	115	12 35	+ 41 30	133 36	+ 75 37	156
217	133	13 04	+ 41 30	111 40	+ 75 34	160
218	154	13 34	+ 41 30	92 43	+ 73 09	164
219	1386	14 04	+ 41 30	80 25	+ 69 10	168
220	145	14 34	+ 41 30	73 08	+ 64 20	172
221	1371	15 04	+ 41 30	68 57	+ 59 04	176
222	1376	15 33	+ 41 30	66 44	+ 53 47	180
223	1369	16 03	+ 41 30	65 41	+ 48 12	184
224	743	16 33	+ 42 00	66 11	+ 42 36	188
225	1135	17 03	+ 42 00	66 35	+ 37 02	192
226	753	17 33	+ 42 00	67 29	+ 31 31	196
227	324	18 03	+ 42 00	68 50	+ 26 04	200
228	1445	18 33	+ 42 00	70 34	+ 20 44	202
229	340	19 03	+ 42 00	72 40	+ 15 32	204
230	281	19 33	+ 42 00	75 06	+ 10 29	206



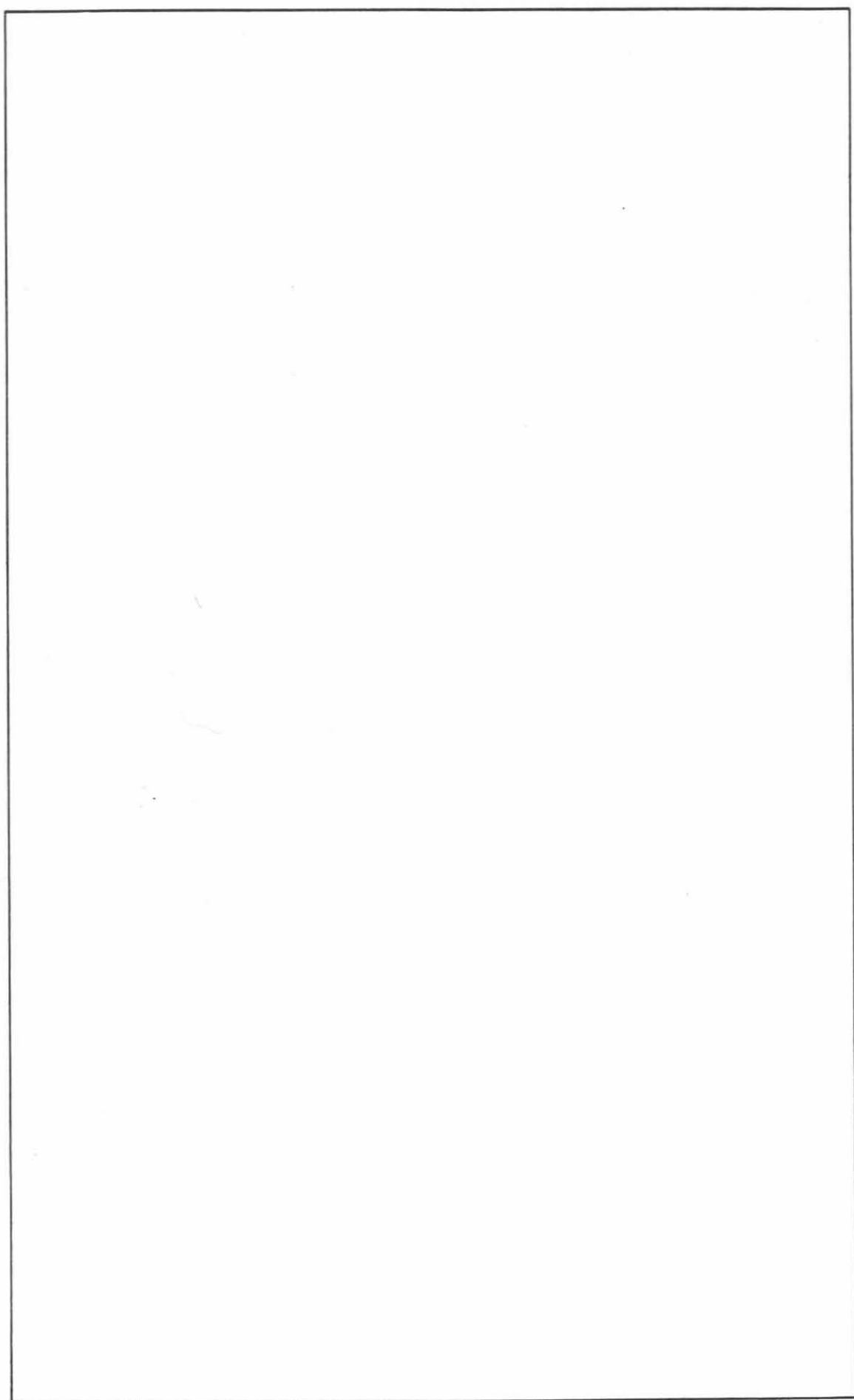
FIELDS OF SURVEY ZONE  $+48^{\circ}$

FIELD No.	Survey Plate No.	Center of Field 1950.0 a $\delta$ h m                  o '                  s	I. A. U. Galactic Coordinates $\lambda$ $\beta$ o '                  s	Page No.
231	224	5 13 + 48 00	160 54 + 5 46	208
232	637	5 47 + 48 00	163 59 + 10 34	210
233	225	6 21 + 48 00	166 36 + 15 38	212
234	691	6 55 + 48 00	168 45 + 20 57	214
235	670	7 29 + 47 30	170 56 + 26 19	218
236	1317	8 03 + 47 30	172 03 + 31 59	222
237	671	8 37 + 47 30	172 32 + 37 42	226
238	1004	9 10 + 47 30	172 16 + 43 16	230
239	672	9 44 + 47 30	170 59 + 48 57	234
240	1348	10 18 + 47 30	168 20 + 54 27	238
241	709	10 52 + 47 30	163 44 + 59 37	242
242	700	11 25 + 47 30	156 36 + 64 04	246
243	1338	11 59 + 47 30	145 37 + 67 39	250
244	1408	12 33 + 47 30	130 47 + 69 39	254
245	1350	13 06 + 47 30	114 44 + 69 38	258
246	1593	13 40 + 47 30	100 00 + 67 34	262
247	120	14 14 + 47 30	89 08 + 63 56	266
248	1368	14 48 + 47 30	81 56 + 59 19	270
249	706	15 21 + 47 30	77 33 + 54 17	274
250	1404	15 55 + 47 30	74 57 + 48 47	276
251	1375	16 29 + 48 00	74 24 + 43 03	280
252	1370	17 03 + 48 00	74 06 + 37 23	284
253	769	17 37 + 48 00	74 35 + 31 42	288
254	130	18 11 + 48 00	75 42 + 26 06	290
255	770	18 45 + 48 00	77 22 + 20 38	294
256	814	19 19 + 48 00	79 32 + 15 20	296
257	283	19 53 + 48 00	82 11 + 10 16	298

FIELDS OF SURVEY ZONE  $+54^{\circ}$

FIELD	Survey Plate	Center of Field 1950.0				I. A. U. Galactic Coordinates				Page
No.	No.	$\alpha$		$\delta$		$\lambda$		$\beta$		No.
		h	m	o	i	o	i	o	i	
258	1309	5	12	+	54 00	155	52	+	9 05	300
259	664	5	50	+	54 00	158	50	+	13 51	302
260	984	6	28	+	54 00	161	14	+	18 56	304
261	971	7	06	+	54 00	163	01	+	24 16	306
262	985	7	43	+	53 30	164	40	+	29 33	310
263	679	8	21	+	53 30	165	04	+	35 11	314
264	982	8	59	+	53 30	164	31	+	40 49	318
265	681	9	37	+	53 30	162	48	+	46 20	322
266	1331	10	14	+	53 30	159	40	+	51 25	326
267	673	10	52	+	53 30	154	28	+	56 10	330
268	59	11	29	+	53 30	147	01	+	60 01	334
269	1389	12	07	+	53 30	136	42	+	62 46	338
270	729	12	44	+	53 30	124	41	+	63 53	342
271	675	13	22	+	53 30	112	05	+	63 12	346
272	1409	13	59	+	53 30	101	26	+	60 53	350
273	715	14	37	+	53 30	93	06	+	57 11	354
274	1096	15	15	+	53 30	87	22	+	52 36	358
275	1413	15	52	+	53 30	83	49	+	47 36	362
276	1101	16	30	+	54 00	82	26	+	42 03	366
277	765	17	08	+	54 00	81	36	+	36 30	370
278	1102	17	46	+	54 00	81	44	+	30 56	374
279	789	18	24	+	54 00	82	42	+	25 25	378
280	542	19	02	+	54 00	84	21	+	20 03	380
281	774	19	40	+	54 00	86	37	+	14 54	382
282	543	20	18	+	54 30	89	53	+	10 20	384





## INTRODUCTION

## INTRODUCTION

In this third volume of the catalogue the material is presented in essentially the same arrangement as in Volumes I and II. This arrangement has been described thoroughly in the introduction to the first volume, with some few remarks added in the second. The methods of reduction and construction have not been changed in any significant manner so that nothing of importance needs to be added here.

One particular fact, however, must be mentioned in this place. It concerns the

### Overlaps

of the  $6^{\circ} \times 6^{\circ}$  squares in Volume III. Due to the arrangements of the fields in the sky and owing to precession, these squares do not cover the entire area depicted in this volume. While, in general, the overlaps are quite sufficient, there are a few instances where small gaps between adjacent squares of consecutive zones were left open. These cases have been taken care of in the appropriate places by a footnote and, if necessary, by a special map of the area involved.

### Large clusters

Two unusually large clusters of galaxies, each extending over several fields and partially into the  $60^{\circ}$  zone of Volume IV, are depicted on composite maps at the end of this volume.

### Acknowledgments

The construction of this third volume has been supported to a great extent by a continued grant from the National Science Foundation. We are also grateful to the California Institute of Technology and its Graphic Arts Facilities for their cooperation and support in the production of this volume.

Our thanks go also to all those who kindly reported errors and omissions in Volumes I and II. A list of these corrections is provided at the end of this volume.



# SYMBOLS USED ON THE CHARTS

## GALAXIES



$$m_p \leq 11.0$$



$$11.1 \leq m_p \leq 12.0$$



$$12.1 \leq m_p \leq 13.0$$



$$13.1 \leq m_p \leq 14.0$$



$$14.1 \leq m_p \leq 15.0$$



$$15.1 \leq m_p \leq 15.7$$

## CLUSTERS OF GALAXIES

5



= Cluster No. 5 on the chart

GC STARS are marked by a cross: 

## DISTANCES OF CLUSTERS

Near:

$$V_s \leq 15,000 \text{ km/sec}$$

MD = Medium distant:

$$15,000 \text{ km/sec} < V_s \leq 30,000 \text{ km/sec}$$

D = Distant:

$$30,000 \text{ km/sec} < V_s \leq 45,000 \text{ km/sec}$$

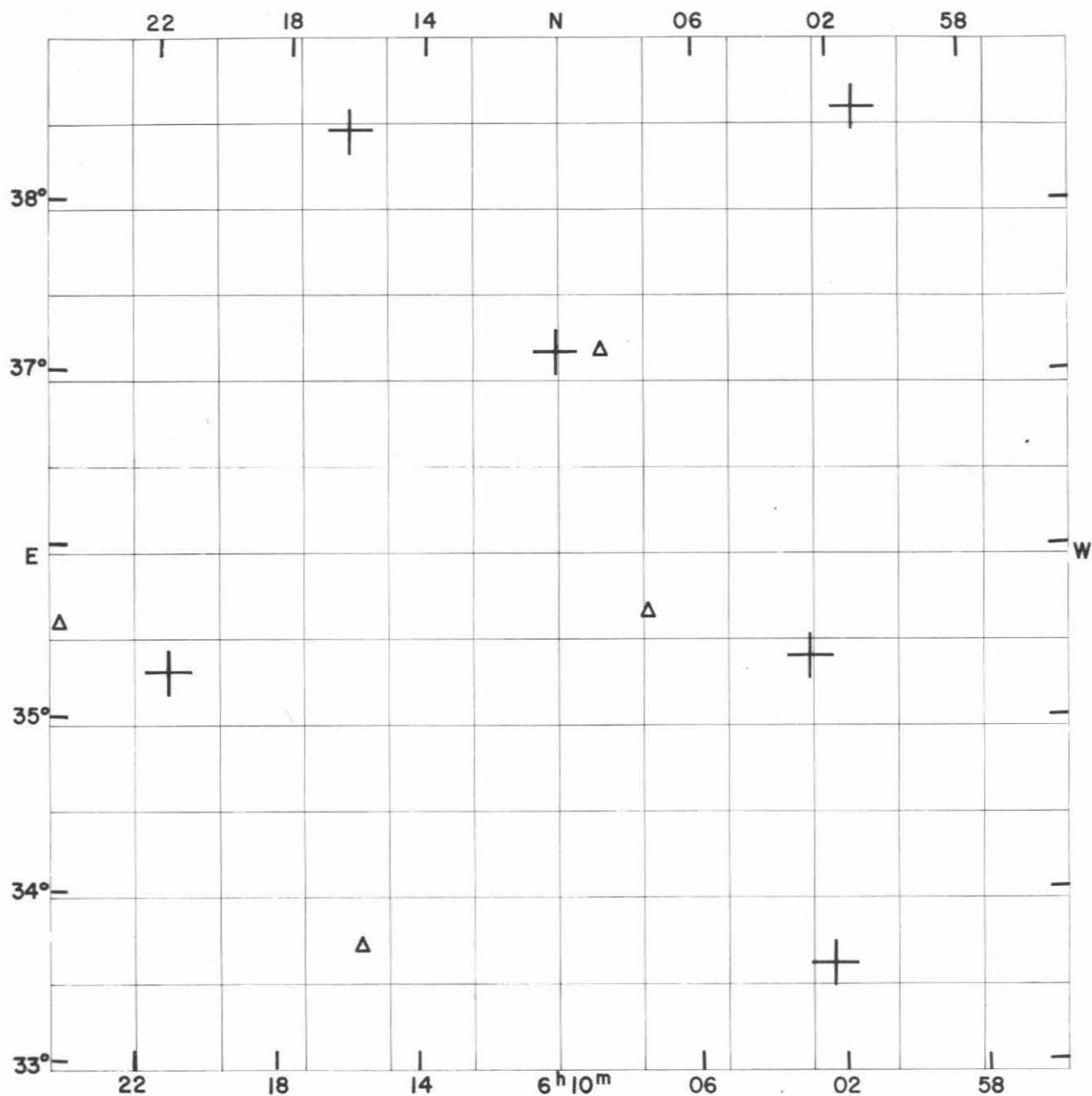
VD = Very distant:

$$45,000 \text{ km/sec} < V_s \leq 60,000 \text{ km/sec}$$

ED = Extremely distant:

$$60,000 \text{ km/sec} < V_s$$

## CATALOGUE



FIELD No. 174

$6^{\text{h}}10^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 942

GC STARS

Nos.	R.A.	Decl.	$m_p$
	h m s	° ' "	
7679	6 01 12.7	+ 38 34 44	6.81
7701	6 02 15.9	+ 33 36 14	6.10
7713	6 02 47.8	+ 35 23 50	6.11
7911	6 10 06.2	+ 37 10 24	6.58
8105	6 16 16.9	+ 38 27 27	7.10
8247	6 21 18.1	+ 35 17 00	6.88

## CLUSTERS OF GALAXIES

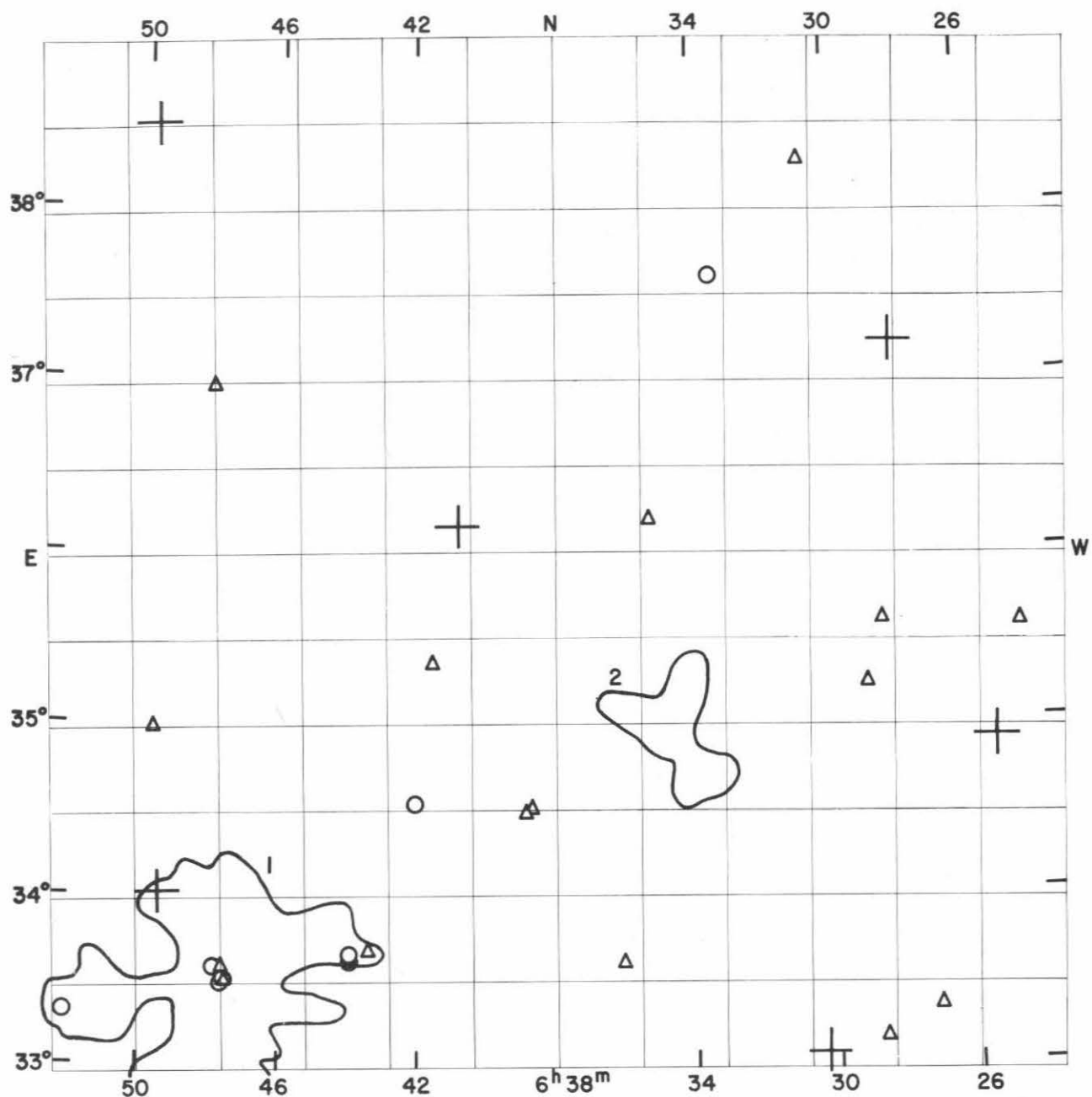
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
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No clusters in this field

## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
6	07.5	+	35 40		15.5		
6	08.8	+	37 10		15.6		
6	15.6	+	33 44		15.7		
6	24.4	+	35 33		15.7		





FIELD No. 175

$6^{\text{h}}38^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 1268

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
8372	6	25	22.7	+	34	53 51	7.27
8445	6	28	07.5	+	37	12 52	6.66
8509	6	30	25.9	+	33	03 47	6.38
8785	6	40	50.9	+	36	09 39	6.28
8989	6	49	29.7	+	34	01 25	3.64
8997	6	49	47.8	+	38	30 09	6.32

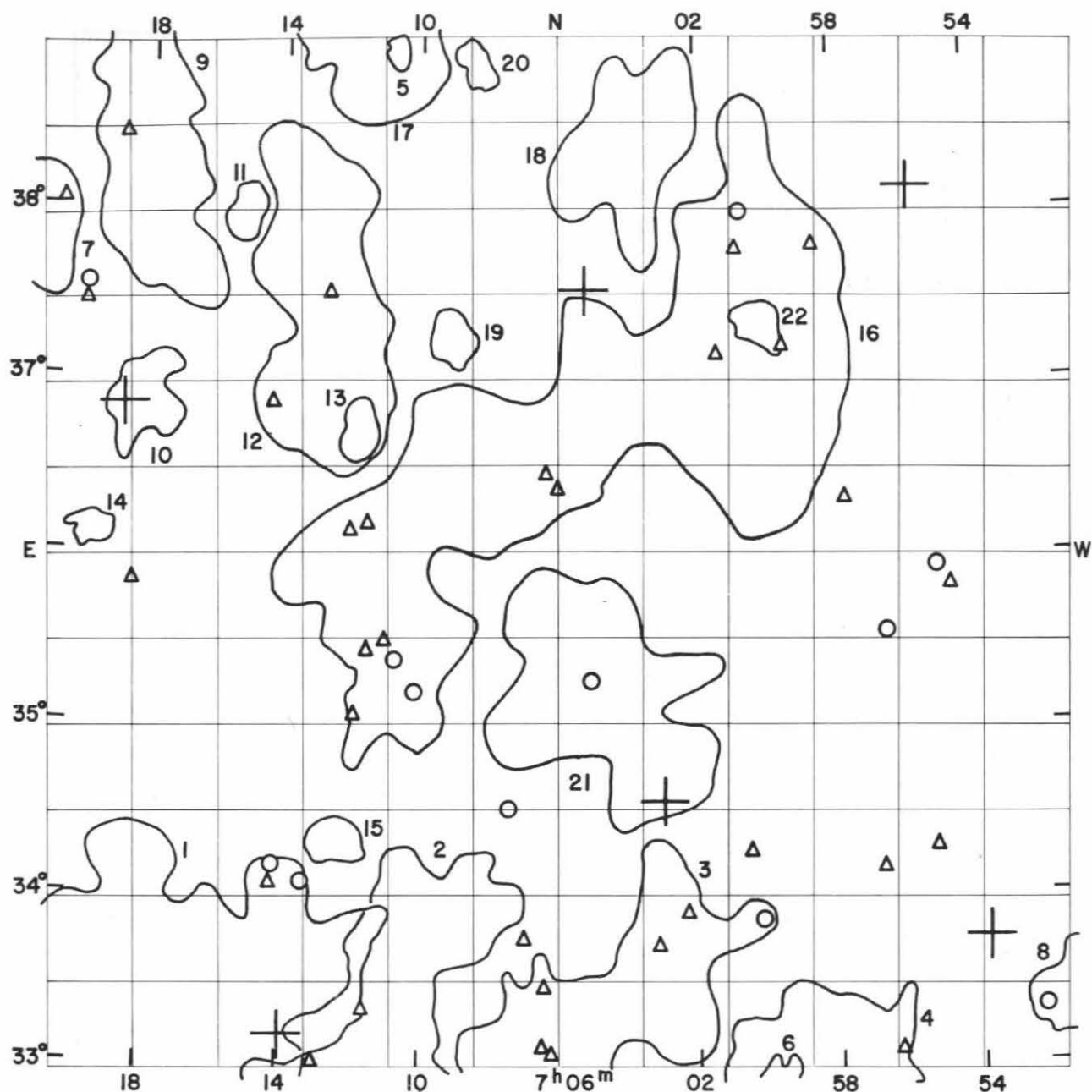
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0634.5 + 3457	compact	72	3.3	MD	2
0647.4 + 3323	open	167	7.5	Near	1

Average number of galaxies per cluster = 119.5

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
6	24.4	+ 35 33		15.7		
6	27.2	+ 33 20		15.7		
6	28.6	+ 35 35		15.1		
6	28.7	+ 33 09		15.5		
6	29.0	+ 35 14		15.4		
6	30.7	+ 38 16		15.4		
6	33.4	+ 37 37		14.8		
6	35.3	+ 36 12		15.6		
6	36.1	+ 33 37		15.5		
6	38.8	+ 34 31		15.6		
6	38.9	+ 34 30		15.5		
6	41.5	+ 35 22		15.7		
6	42.0	+ 34 32		14.9		
6	43.4	+ 33 41		15.2		diffuse spiral
6	44.0	+ 33 38	2274	13.6		
6	44.0	+ 33 40	2275	14.5		
6	47.5	+ 33 31	2288	15.5		
6	47.5	+ 33 32	2289	14.6		
6	47.6	+ 33 30	2290	14.6		
6	47.6	+ 33 35	2291	15.3		compact
6	47.8	+ 33 35	2294	15.0		
6	48.0	+ 36 58		15.3		compact
6	49.6	+ 34 59		15.2		compact
6	52.2	+ 33 20		14.8		



FIELD No. 176

7<sup>h</sup>06<sup>m</sup> + 36°00'

Survey Plate No. 889

#### GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	°	'	"	
9101	6	53	43.6	+	33	14 51	6.01
9151	6	55	38.6	+	38	07 22	6.15
9354	7	02	54.0	+	34	33 07	5.60
9412	7	05	13.5	+	37	31 31	6.32
9655	7	13	54.8	+	33	11 04	6.90
9796	7	18	42.4	+	36	51 23	5.21

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0647.4 + 3323	open	167	7.5	Near	8
0658.7 + 3300	medium compact	165	5.5	MD	4
0659.8 + 3253	medium compact	74	1.6	VD	6
0700.1 + 3719	medium compact	82	1.5	VD	22
0704.0 + 3821	medium compact	108	4.9	MD	18
0704.7 + 3510	medium compact	132	6.8	MD	21
0705.4 + 3642	open	236	12.7	Near	16
0706.6 + 3221	open	360	11.2	Near	3
0708.4 + 3849	medium compact	80	1.2	VD	20
0709.1 + 3714	medium compact	104	1.7	VD	19
0710.7 + 3855	compact	57	0.9	ED	5
0711.0 + 3311	medium compact	289	7.3	MD	2
0711.2 + 3852	medium compact	119	4.3	D	17
0711.8 + 3641	compact	139	1.6	VD	13
0712.4 + 3419	medium compact	136	1.6	ED	15
0713.0 + 3725	medium compact	185	6.7	MD	12
0715.2 + 3757	compact	89	1.6	ED	11
0718.0 + 3650	medium compact	149	2.7	VD	10
0718.0 + 3820	medium compact	106	5.9	MD	9
0718.6 + 3249	open	362	14.7	Near	1
0719.5 + 3606	medium compact	92	1.2	ED	14
0724.3 + 3818	medium compact	205	8.3	MD	7

Average number of galaxies per cluster = 156.2

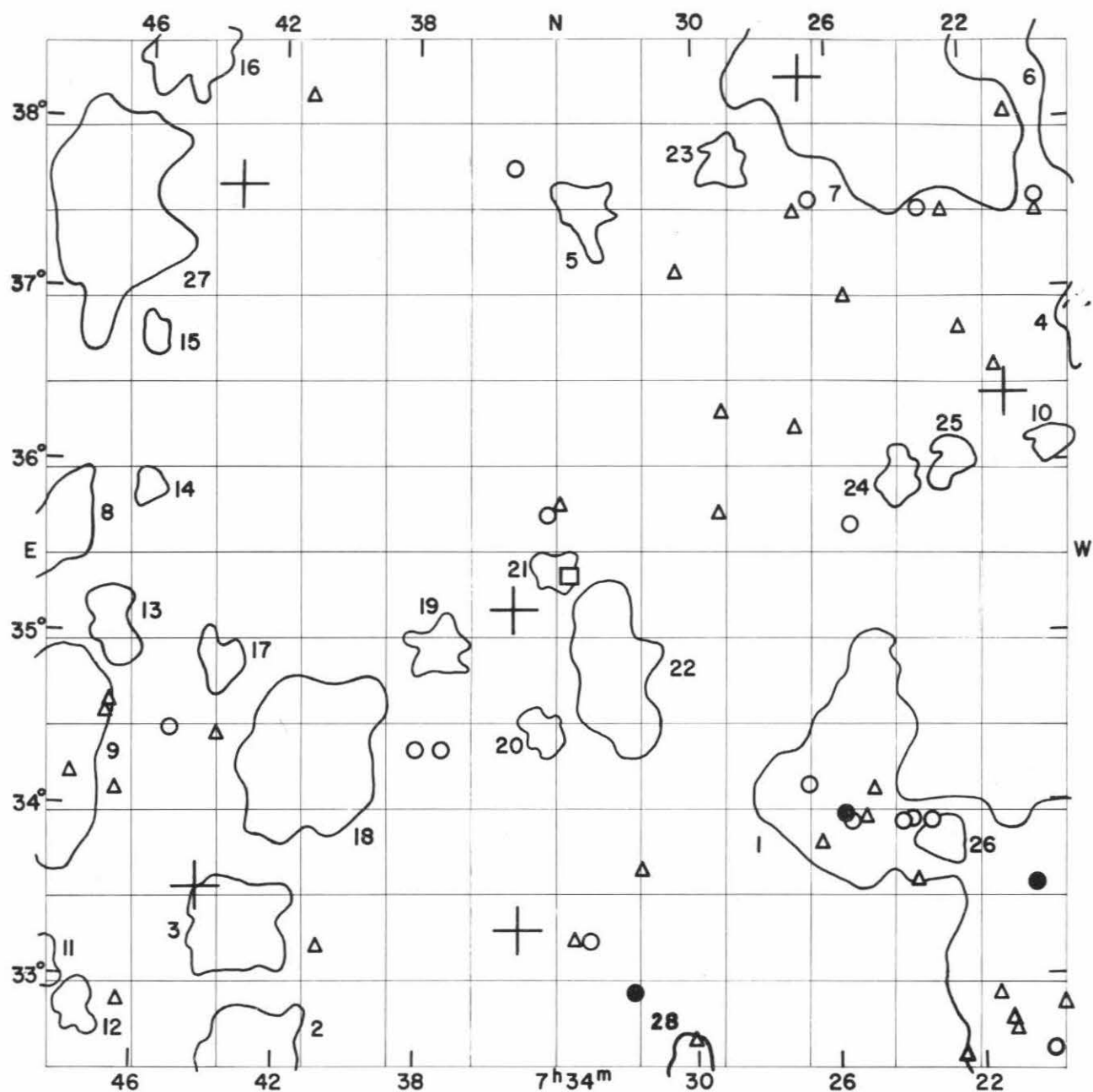
## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	'				
6	52.2	+33	20		14.8		
6	54.7	+35	48		15.4		
6	55.1	+35	55		14.8		
6	55.2	+34	17		15.3		diffuse spiral
6	56.3	+33	05		15.7		
6	56.5	+35	31	2175*	15.0		diffuse spiral
6	56.7	+34	09		15.6		
6	57.7	+36	18		15.6		
6	58.5	+37	48		15.2		
6	59.5	+37	12		15.1		
7	00.2	+33	51		14.7		double system
7	00.5	+34	16		15.6		
7	00.7	+37	59		15.0		
7	00.8	+37	46		15.5		
7	01.4	+37	08		15.3		
7	02.2	+33	54		15.4		diffuse spiral
7	03.1	+33	42		15.5		compact
7	05.0	+35	15	2333	14.1		
7	06.0	+36	22		15.4		very diffuse spiral
7	06.2	+33	04		15.7		
7	06.3	+36	27		15.5		
7	06.4	+33	27		15.4		
7	06.5	+33	07		15.6		very compact
7	07.0	+33	45		15.6		
7	07.5	+34	30		14.4		
7	10.1	+35	12		14.3		



Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
7	10.8	+35	22		14.5		
7	11.1	+35	29		15.5		
7	11.6	+33	20		15.2		
7	11.6	+35	25		15.7		
7	11.6	+36	10		15.1		
7	11.9	+35	03		15.6		
7	12.1	+36	07		15.4		
7	12.7	+37	30		15.7		diffuse
7	13.0	+33	01		15.3		
7	13.4	+34	05		14.3		
7	14.2	+34	04		15.5		
7	14.2	+34	10		14.9		
7	14.3	+36	52		15.6		compact
7	18.4	+35	50		15.4		
7	18.9	+38	26		15.5		
7	19.8	+37	26		15.5		
7	19.8	+37	33		15.0		
7	20.7	+38	02		15.6		compact





FIELD No. 177

$7^{\text{h}}34^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 1336

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
9858	7	20	57.3	+	36	24 34	6.97
10018	7	26	47.8	+	38	16 30	6.86
10230	7	35	07.0	+	33	18 03	6.91
10237	7	35	16.2	+	35	09 45	5.61
10460	7	43	19.3	+	37	38 25	5.45
10482	7	44	17.2	+	33	32 25	5.29

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0718.0 + 3650	medium compact	149	2.7	VD	4
0718.0 + 3820	medium compact	106	5.9	MD	6
0718.6 + 3249	open	362	14.7	Near	1
0719.5 + 3606	medium compact	92	1.2	ED	10
0722.6 + 3600	compact	59	1.5	VD	25
0723.0 + 3347	compact	58	1.5	VD	26
0724.1 + 3555	medium compact	60	1.5	VD	24
0724.3 + 3818	medium compact	205	8.3	MD	7
0729.1 + 3746	compact	83	1.6	VD	23
0731.9 + 3125	open	178	8.0	Near	28
0732.4 + 3447	medium compact	64	3.8	D	22
0733.1 + 3729	medium compact	67	1.8	D	5
0734.0 + 3524	compact	93	1.4	ED	21
0734.4 + 3426	medium compact	84	1.4	VD	20
0737.4 + 3455	compact	93	1.8	VD	19
0741.0 + 3417	medium compact	141	4.9	MD	18
0742.4 + 3232	open	86	3.3	MD	2
0743.0 + 3317	open	90	3.2	D	3
0743.6 + 3450	medium compact	83	1.6	D	17
0745.0 + 3825	medium compact	82	2.8	D	16
0745.7 + 3644	compact	63	1.1	VD	15
0745.8 + 3550	compact	62	1.0	VD	14
0746.7 + 3502	medium compact	108	1.9	D	13
0747.1 + 3729	open	87	5.3	MD	27
0747.6 + 3248	medium compact	81	1.5	MD	12
0748.5 + 3302	compact	80	1.5	VD	11
0748.7 + 3531	medium compact	107	2.9	D	8
0749.0 + 3419	medium compact	117	5.6	D	9

Average number of galaxies per cluster = 105.0

## GALAXIES

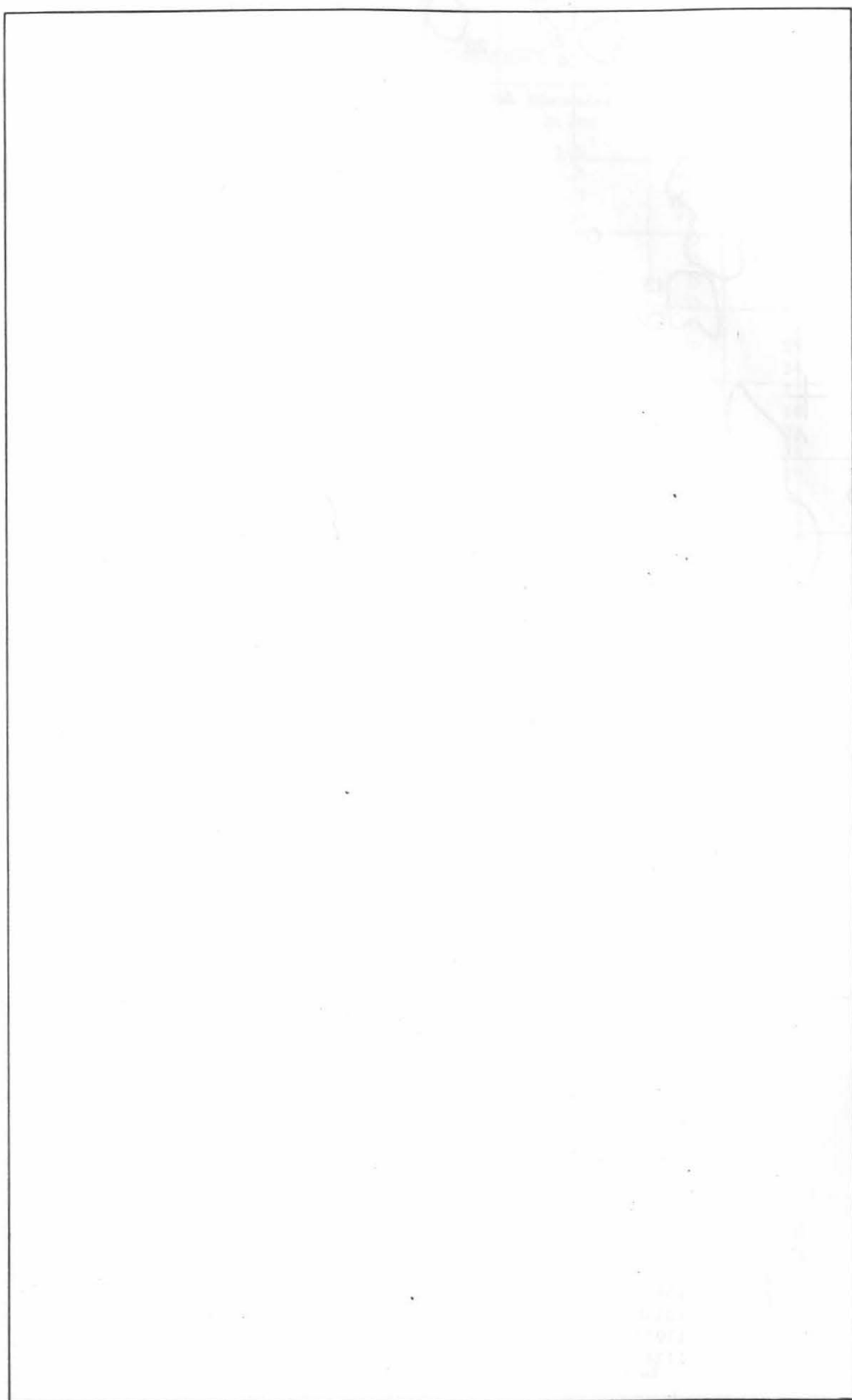
Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
a 1950 δ							
h	m	o	i				
7	19.7	+ 32	51	2185*	15.7		very diffuse
7	19.8	+ 37	26		15.5		
7	19.8	+ 37	33		15.0		
7	20.0	+ 32	36		14.9		
7	20.5	+ 33	31		13.7		double system
7	20.7	+ 38	02		15.6		compact
7	21.0	+ 32	42		15.3		
7	21.2	+ 32	45		15.6		
7	21.2	+ 36	33		15.7		star superposed
7	21.5	+ 32	55		15.3		
7	22.2	+ 36	46	15.1			
7	22.6	+ 32	33	15.6			
7	22.6	+ 37	27	15.5			
7	23.3	+ 33	54	2373	14.5		
7	23.3	+ 37	28		14.6		double system, jets
7	23.8	+ 33	34		15.6		
7	23.9	+ 33	55	2375	14.7		
7	24.2	+ 33	54	2378=2379	14.9	+4030	very compact
7	25.0	+ 34	05		15.5		
7	25.2	+ 33	56	2385	15.2		

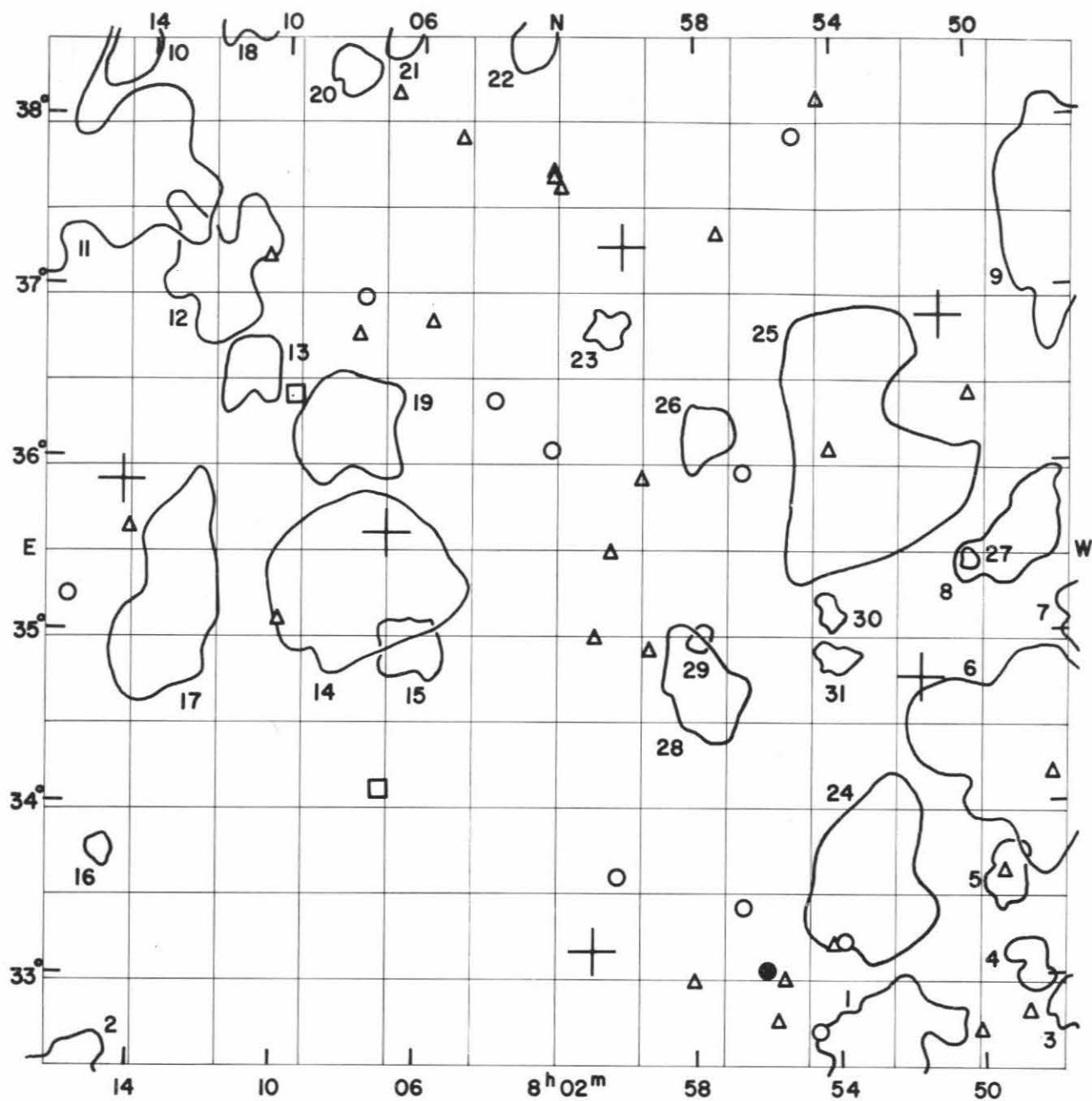
Position a 1950 $\delta$ h m o			NGC IC*	$m_p$	$V_s$ km/sec	Remarks	
7 25.5	+ 35	39		14.9			
7 25.6	+ 33	55	2388	14.7			
7 25.6	+ 36	58	2387	15.3		double system	
7 25.8	+ 33	57	2389	13.5	+3816		
7 26.5	+ 33	47		15.3			
7 26.5	+ 37	33	2190*	14.8			
7 26.8	+ 34	07	2393	14.9			
7 27.0	+ 37	28		15.7		diffuse spiral	
7 27.1	+ 36	12		15.3		diffuse spiral	
7 29.2	+ 36	17		15.5			
7 29.3	+ 35	43		15.4			
7 30.0	+ 32	40		15.4			
7 30.5	+ 37	07		15.7		very diffuse spiral	
7 31.6	+ 33	38		15.7			
7 31.8	+ 32	56	2410	13.9			
7 33.0	+ 33	14	2201*	14.9			
7 33.5	+ 33	14		15.5			
7 33.6	+ 35	21	2415	12.5	+3822		
7 33.9	+ 35	46		15.3			
7 34.3	+ 35	43		14.2			
7 35.2	+ 37	45		15.0			
7 37.3	+ 34	20	2203*	14.5			
7 38.0	+ 34	20	2204*	14.6			
7 40.8	+ 33	11		15.7			
7 41.2	+ 38	09		15.7			
7 43.8	+ 34	25		15.7			
7 45.0	+ 34	28		14.6			
7 46.4	+ 32	51		15.4			
7 46.6	+ 34	05	2207*	15.4			
7 46.8	+ 34	37		15.6			
7 46.9	+ 34	33		15.5		very compact, long jet	
7 47.9	+ 34	11		15.6		extremely diffuse	

MAGNITUDES AND TYPES FROM OTHER SOURCES							
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958
2379	-	-	14.70	S1	14.6	E0	- -
2389	-	-	13.28	Sc	13.3	Sc	- -







FIELD No. 178

$8^{\text{h}}02^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 989

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
10662	7	50	53.4	+	36	52 22	7.12
10682	7	51	34.5	+	34	45 15	7.72
10902	8	00	09.3	+	37	16 41	7.12
10930	8	00	57.3	+	33	10 21	6.61
11073	8	06	56.5	+	35	36 24	6.64
11281	8	14	36.8	+	35	53 04	6.91

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0746.7 + 3502	medium compact	108	1.9	D	7
0747.1 + 3729	open	87	5.3	MD	9
0747.6 + 3248	medium compact	81	1.5	MD	3
0748.5 + 3302	compact	80	1.5	VD	4
0748.7 + 3531	medium compact	107	2.9	D	8
0749.0 + 3419	medium compact	117	5.6	D	6
0749.2 + 3335	medium compact	74	1.6	D	5
0750.1 + 3525	compact	48	0.5	ED	27
0752.7 + 3236	open	158	3.8	D	1
0753.0 + 3606	open	167	6.6	D	25
0753.1 + 3331	medium compact	107	4.7	MD	24
0754.0 + 3450	medium compact	58	1.2	ED	31
0754.1 + 3506	medium compact	55	0.9	ED	30
0757.7 + 3610	compact	110	1.8	ED	26
0757.8 + 3441	medium compact	91	2.9	D	28
0757.9 + 3458	compact	48	0.8	ED	29
0800.5 + 3646	medium compact	64	1.1	ED	23
0802.8 + 3827	medium compact	111	1.7	ED	22
0806.2 + 3455	medium compact	165	2.0	E	15
0806.7 + 3831	medium compact	76	1.3	ED	21
0807.7 + 3520	medium compact	177	5.5	MD	14
0808.0 + 3612	medium compact	103	3.5	D	19
0808.1 + 3817	medium compact	107	1.5	VD	20
0810.9 + 3631	medium compact	98	2.0	D	13
0811.2 + 3838	medium compact	108	1.8	ED	18
0812.0 + 3705	open	109	3.6	D	12
0813.0 + 3509	open	121	4.5	D	17
0814.7 + 3825	medium compact	73	1.9	VD	10
0814.9 + 3344	compact	64	0.8	ED	16
0816.0 + 3155	open	324	5.6	D	2
0817.2 + 3802	open	374	9.0	MD	11

Average number of galaxies per cluster = 115.2

## GALAXIES

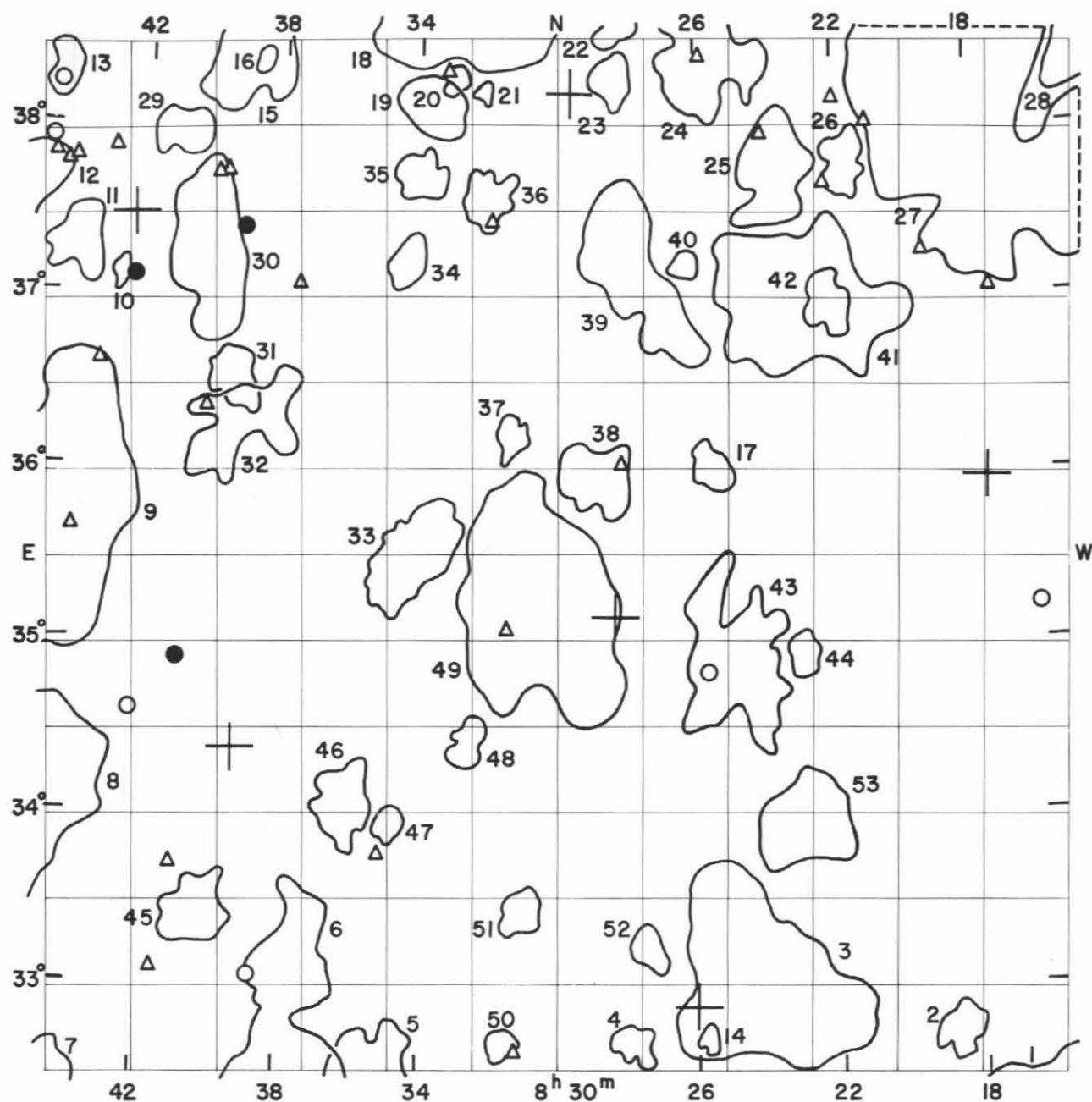
Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
7	47.9	+34 11		15.6		extremely diffuse
7	48.7	+32 47		15.7		diffuse
7	49.3	+33 36		15.3		
7	50.1	+32 40		15.7		
7	50.1	+36 24		15.4		
7	53.8	+33 13		14.7		
7	54.1	+33 12		15.2		
7	54.2	+36 04		15.5		diffuse
7	54.4	+38 08		15.5		
7	54.5	+32 42	2211*	14.5		
7	55.1	+37 55	2484	14.9		
7	55.5	+33 00		15.6		
7	55.7	+32 45	2212*	15.3		
7	56.0	+33 03		13.5		
7	56.6	+35 57		14.9		
7	56.7	+33 26	2214*	14.4		
7	57.4	+37 20		15.5		diffuse spiral

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
7	58.0	+	32 59		15.7		
7	59.4	+	34 55		15.2		
7	59.6	+	35 55		15.6		
8	00.3	+	33 36		14.7		
8	00.5	+	35 29		15.4		
8	00.9	+	35 00		15.4		
8	01.9	+	37 36	2222*	15.3		
8	02.1	+	37 42		15.2		
8	02.2	+	36 05	2225*	15.0		
8	02.2	+	37 41		15.7		very compact
8	03.8	+	36 23		14.8		
8	04.8	+	37 55		15.6		
8	05.7	+	36 50		15.3		compact
8	06.8	+	38 10		15.4		
8	07.0	+	34 06	2532	12.9	+5153	
8	07.7	+	36 58		14.7		system with plume + jet
8	07.8	+	36 45		15.5		
8	09.7	+	36 24	2543=2232*	12.7		
8	10.0	+	35 05		15.1		
8	10.5	+	37 12		15.5		
8	14.4	+	35 36		15.1		
8	16.2	+	35 13		14.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES							
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958
2532	-	-	13.05	Sc	12.9	Sc	- -





FIELD No. 179

$8^{\text{h}}30^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 648

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
11364	8	17	34.7	+	35	56 16	6.93
11591	8	26	04.8	+	32	51 34	6.60
11649	8	28	24.1	+	35	08 07	7.32
11684	8	29	40.3	+	38	11 22	6.05
11958	8	39	22.2	+	34	22 18	7.37
12045	8	42	25.8	+	37	28 29	6.91

## CLUSTERS OF GALAXIES

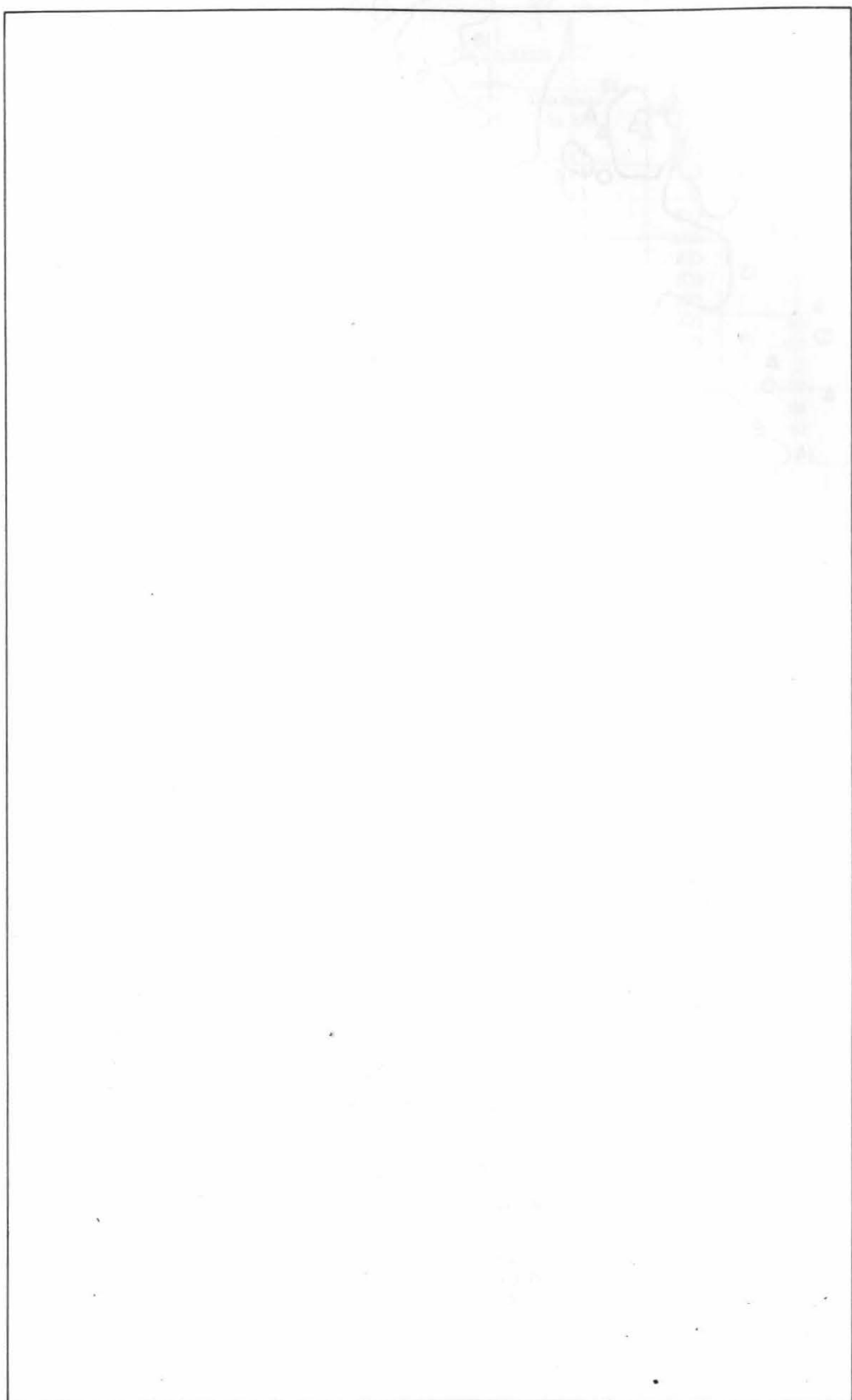
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0814.7 + 3825	medium compact	73	1.9	VD	28
0816.0 + 3155	open	324	5.6	D	1
0817.2 + 3802	open	374	9.0	MD	27
0818.7 + 3241	compact	105	1.4	VD	2
0821.6 + 3745	compact	107	1.6	ED	26
0822.1 + 3658	medium compact	124	1.7	ED	42
0823.0 + 3355	medium compact	76	3.0	VD	53
0823.0 + 3455	medium compact	79	1.2	ED	44
0823.0 + 3658	open	125	5.2	D	41
0823.6 + 3744	open	103	2.7	VD	25
0824.1 + 3258	open	175	5.7	D	3
0824.9 + 3451	medium compact	162	4.1	VD	43
0825.6 + 3600	compact	92	1.3	ED	17
0825.6 + 3826	compact	188	3.5	ED	24
0825.8 + 3240	compact	49	0.7	ED	14
0826.4 + 3710	compact	76	0.8	ED	40
0827.4 + 3311	compact	91	1.2	ED	52
0827.7 + 3707	compact	159	3.8	VD	39
0827.9 + 3236	medium compact	102	1.3	VD	4
0828.3 + 3840	compact	55	1.5	VD	22
0828.5 + 3815	medium compact	89	1.4	ED	23
0828.9 + 3557	medium compact	205	2.2	ED	38
0830.4 + 3510	open	129	6.2	MD	49
0831.0 + 3324	compact	112	1.3	ED	51
0831.3 + 3610	medium compact	93	1.2	ED	37
0831.6 + 3238	compact	78	1.0	ED	50
0832.1 + 3734	open	125	1.7	ED	36
0832.2 + 3811	medium compact	45	0.5	ED	21
0832.2 + 3845	medium compact	130	5.5	Near	18
0832.6 + 3424	compact	80	1.2	ED	48
0833.0 + 3815	compact	47	0.8	ED	20
0833.8 + 3806	compact	160	1.9	ED	19
0834.0 + 3743	open	120	1.6	ED	35
0834.2 + 3529	medium compact	160	2.8	ED	33
0834.5 + 3711	compact	94	1.3	ED	34
0834.9 + 3355	compact	77	1.0	ED	47
0835.4 + 3225	medium compact	127	3.2	D	5
0836.1 + 3401	medium compact	64	2.0	VD	46
0837.6 + 3238	medium compact	329	5.0	MD	6
0838.6 + 3823	compact	47	0.6	ED	16
0839.0 + 3824	compact	240	2.9	VD	15
0839.2 + 3616	open	89	2.9	MD	32
0839.5 + 3631	compact	122	1.7	ED	31
0840.3 + 3323	compact	83	2.0	ED	45
0840.3 + 3717	open	87	3.7	D	30
0841.1 + 3758	medium compact	152	1.7	ED	29
0842.9 + 3708	compact	89	0.7	ED	10
0844.1 + 3718	medium compact	105	1.9	D	11
0844.4 + 3542	medium compact	148	6.5	D	9
0844.5 + 3208	open	171	3.3	D	7
0844.7 + 3819	compact	107	1.3	ED	13
0844.9 + 3407	medium compact	121	5.2	MD	8
0845.5 + 3740	compact	119	1.9	ED	12

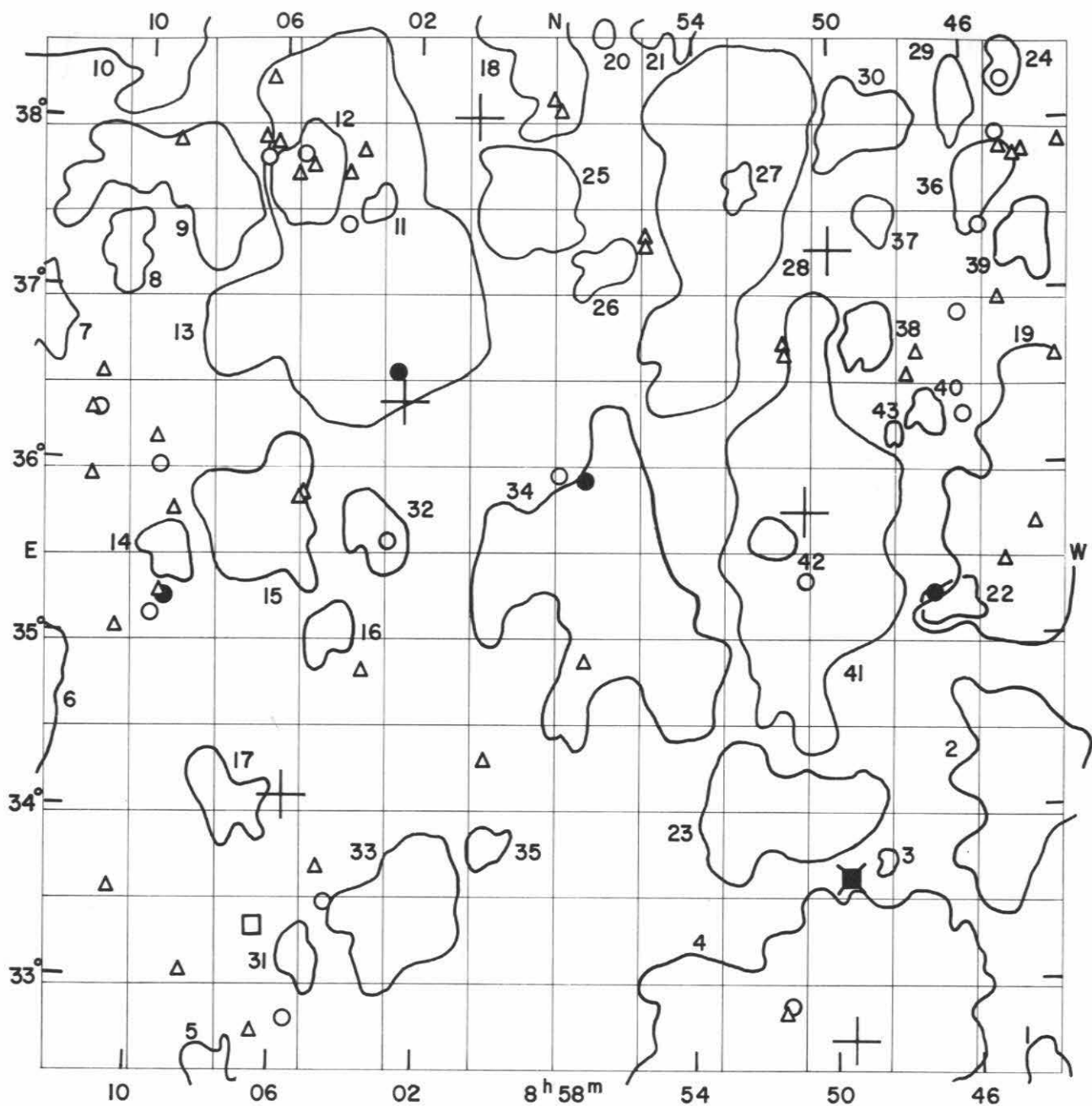
Average number of galaxies per cluster = 124.2

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
8	16.2	+35 13		14.6		
8	17.4	+37 02		15.7		
8	19.4	+37 16		15.5		
8	20.9	+38 01		15.5		
8	21.9	+38 09		15.4		
8	22.3	+37 40		15.6		
8	24.1	+37 56		15.2		
8	25.7	+34 50		14.6		
8	25.8	+38 24		15.1		
8	28.2	+36 01		15.7		
8	31.3	+32 37	2384*	15.3		double system
8	31.5	+35 05		15.7		compact
8	31.9	+37 26	2385*	15.1		
8	33.2	+38 18		15.5		compact
8	35.1	+33 45		15.6		
8	37.5	+37 05		15.7		
8	38.7	+33 03		14.5		
8	39.2	+37 23	2638	13.7		
8	39.7	+37 43		15.2		
8	39.9	+37 42		15.7		
8	40.2	+36 22		15.5		
8	40.9	+34 54	2649	13.1		
8	41.0	+33 42		15.2		
8	41.5	+33 05		15.6		very compact
8	42.2	+34 37		14.7		
8	42.4	+37 07		13.8		compact
8	43.0	+37 52		15.4		diffuse
8	43.3	+36 37		15.6		
8	44.0	+35 39		15.7		
8	44.1	+37 49		15.7		
8	44.4	+37 47		15.7		compact
8	44.7	+38 15	2400*	15.0		
8	44.8	+37 50		15.6		
8	44.9	+37 56	2401*	15.0		compact







FIELD No. 180

$8^{\text{h}}58^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 1342

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
12242	8	49	29.6	+	32	39 46	5.75
12255	8	50	01.1	+	37	15 42	7.18
12272	8	50	47.1	+	35	43 43	6.02
12505	9	00	17.1	+	38	02 30	7.10
12546	9	02	26.1	+	36	22 51	6.88
12613	9	05	47.3	+	34	05 12	5.95

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0844.1 + 3718	medium compact	105	1.9	D	39
0844.4 + 3542	medium compact	148	6.5	D	19
0844.5 + 3208	open	171	3.3	D	1
0844.7 + 3819	compact	107	1.3	ED	24
0844.9 + 3407	medium compact	121	5.2	MD	2
0845.5 + 3740	compact	119	1.9	ED	36
0846.2 + 3809	medium compact	144	1.6	ED	29
0846.6 + 3512	medium compact	118	1.6	ED	22
0847.2 + 3617	compact	135	1.2	ED	40
0848.2 + 3610	compact	53	0.6	ED	43
0848.5 + 3341	compact	46	0.6	ED	3
0848.7 + 3727	compact	99	1.4	VD	37
0848.9 + 3645	medium compact	147	1.9	ED	38
0849.0 + 3800	medium compact	126	2.7	VD	30
0850.5 + 3237	open	510	9.8	MD	4
0850.6 + 3536	open	246	8.0	MD	41
0851.5 + 3358	open	102	4.5	D	23
0851.8 + 3534	medium compact	79	1.3	VD	42
0852.7 + 3739	medium compact	76	1.1	ED	27
0853.1 + 3728	medium compact	324	7.2	MD	28
0855.1 + 3918	medium compact	375	5.5	D	21
0856.4 + 3520	medium compact	359	7.5	VD	34
0856.6 + 3710	open	104	1.7	ED	26
0856.7 + 3832	medium compact	58	0.8	ED	20
0858.6 + 3836	medium compact	149	4.6	MD	18
0858.8 + 3732	open	128	3.5	D	25
0900.0 + 3347	medium compact	84	1.2	ED	35
0902.4 + 3324	medium compact	225	4.0	D	33
0903.2 + 3538	medium compact	91	2.0	VD	32
0903.3 + 3731	compact	107	1.1	ED	11
0903.9 + 3716	open	147	9.4	Near	13
0904.5 + 3501	medium compact	118	1.7	ED	16
0905.2 + 3309	compact	122	1.5	ED	31
0905.5 + 3740	medium compact	97	2.6	D	12
0906.5 + 3542	medium compact	208	4.1	VD	15
0907.3 + 3403	medium compact	62	2.2	ED	17
0907.5 + 3214	open	105	2.9	D	5
0909.2 + 3529	medium compact	132	1.6	ED	14
0909.5 + 3738	open	154	4.4	D	9
0910.7 + 3714	medium compact	102	1.8	ED	8
0911.2 + 3846	open	221	6.1	MD	10
0913.1 + 3651	medium compact	151	2.1	ED	7
0915.6 + 3409	medium compact	185	8.4	Near	6

Average number of galaxies per cluster = 150.2

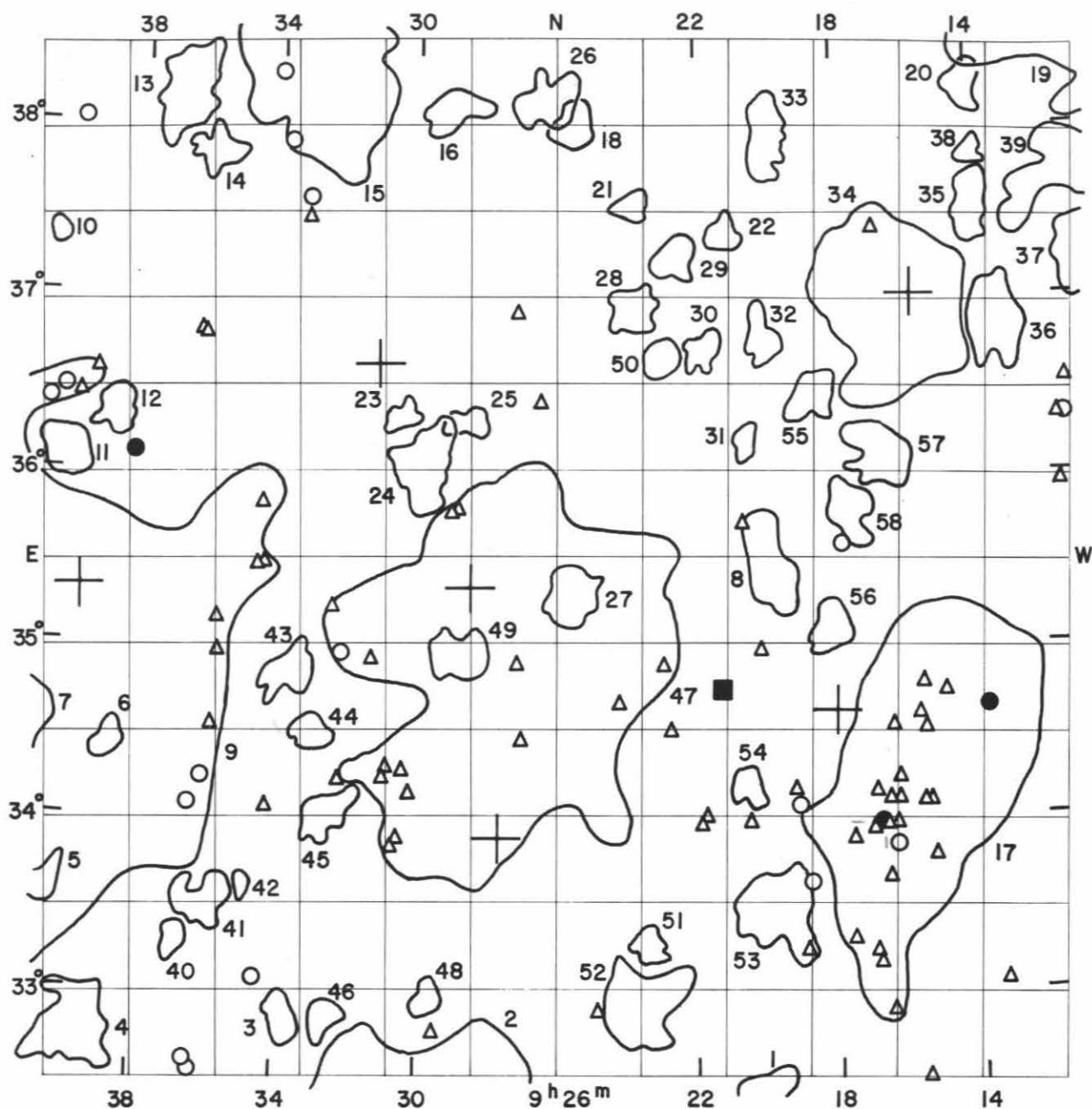
## GALAXIES

Position a 1950 δ	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h m o				
8 43.0 + 37 52		15.4		diffuse
8 43.3 + 36 37		15.6		
8 44.0 + 35 39		15.7		
8 44.1 + 37 49		15.7		
8 44.4 + 37 47		15.7		compact

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
8	44.7	+38	15	2400*	15.0		
8	44.8	+37	50		15.6		
8	44.9	+37	56	2401*	15.0		compact
8	45.0	+35	25		15.7		
8	45.0	+36	57		15.2		
8	45.5	+37	23	2405*	14.8		
8	46.1	+36	17		14.3		
8	46.2	+36	53	2668	14.9		
8	47.0	+35	15		13.6		
8	47.5	+36	39		15.4		
8	47.8	+36	30		15.5		
8	49.6	+33	36	2683	9.7	+ 336	$m_H = 10.8$ Sc eruptive spiral diffuse spiral
8	50.7	+35	20		15.0		
8	51.2	+32	52	2421*	14.9		
8	51.3	+32	49		15.3		
8	51.3	+36	38		15.1		
8	51.3	+36	41		15.7		
8	55.3	+37	16		15.7		halo + extremely faint jet
8	55.3	+37	20		15.6		
8	57.1	+35	55	2719	13.7		double system
8	57.2	+34	51		15.5		
8	57.8	+35	57		14.8		
8	57.8	+38	04	2427*	15.7		
8	58.0	+38	08		15.7		compact
9	00.0	+34	17		15.5		
9	02.6	+36	32		14.0		
9	02.8	+35	34	2746	14.4		
9	03.6	+34	49		15.2		
9	03.6	+37	50		15.6		
9	04.1	+37	24	2434*	14.5		
9	04.1	+37	42		15.1		double system
9	04.5	+33	28		14.3		
9	04.7	+33	40		15.3		
9	05.1	+37	44		15.6		
9	05.3	+35	50		15.6		
9	05.4	+35	49		15.4		
9	05.4	+37	49	2759	14.2		
9	05.5	+32	47	2439*	14.7		
9	05.6	+37	42		15.2		
9	06.2	+37	53		15.7		
9	06.4	+32	43		15.4		diffuse spiral
9	06.4	+33	19	2770	12.1		
9	06.4	+38	14		15.5		
9	06.5	+37	47	527*	14.6		
9	06.6	+37	54		15.1		
9	08.5	+33	02		15.4		extremely diffuse spiral
9	09.0	+35	44		15.5		extremely diffuse
9	09.1	+37	52		15.5		
9	09.2	+35	13	2778	13.1		
9	09.3	+35	15	2779	15.5		
9	09.5	+35	59		14.9		double system
9	09.6	+35	07	2780	14.2		
9	09.6	+36	08		15.4		
9	10.6	+33	31		15.7		
9	10.6	+35	02		15.4		
9	11.2	+36	31		15.6		
9	11.3	+36	18		15.0		
9	11.4	+35	55		15.6		
9	11.5	+36	17		15.5		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2683	9.8	Sc	10.65	Sb	10.4	Sb	10.53	Sb-



FIELD No. 181

$9^{\text{h}}26^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 925

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
12830	9	15	44.4	+	37	00 56	3.82
12880	9	18	00.9	+	34	36 19	3.30
13112	9	27	42.3	+	33	52 36	5.98
13133	9	28	30.2	+	35	19 31	5.52
13203	9	31	10.0	+	36	37 14	4.62
13388	9	39	42.3	+	35	19 23	6.03

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0909.5 + 3738	open	154	4.4	D	39
0910.7 + 3714	medium compact	102	1.8	ED	37
0911.2 + 3846	open	221	6.1	MD	19
0913.1 + 3651	medium compact	151	2.1	ED	36
0913.8 + 3750	open	64	0.8	VD	38
0913.9 + 3731	medium compact	99	1.6	ED	35
0914.0 + 3814	medium compact	111	1.3	ED	20
0915.6 + 3409	medium compact	185	8.4	Near	17
0916.1 + 3657	medium compact	228	5.5	VD	34
0916.6 + 3605	medium compact	215	1.9	ED	57
0917.5 + 3545	medium compact	105	1.5	VD	58
0918.1 + 3505	medium compact	137	1.4	ED	56
0918.5 + 3140	open	226	5.2	D	1
0918.6 + 3625	open	91	1.5	ED	55
0919.8 + 3326	medium compact	172	2.5	VD	53
0919.8 + 3755	medium compact	151	1.7	ED	33
0919.9 + 3526	medium compact	160	2.1	ED	8
0920.0 + 3646	compact	90	1.3	ED	32
0920.5 + 3410	compact	88	1.1	ED	54
0920.5 + 3610	medium compact	77	0.8	ED	31
0921.0 + 3722	medium compact	97	1.1	ED	22
0921.7 + 3642	medium compact	82	1.1	VD	30
0922.5 + 3715	open	101	1.3	ED	29
0922.9 + 3640	medium compact	99	1.1	ED	50
0923.4 + 3315	compact	71	1.0	ED	51
0923.6 + 3254	open	88	2.5	D	52
0923.8 + 3656	open	120	1.4	ED	28
0923.9 + 3732	medium compact	77	0.9	ED	21
0925.5 + 3517	medium compact	69	1.7	VD	27
0925.5 + 3800	compact	234	1.3	ED	18
0926.1 + 3809	open	57	1.8	VD	26
0927.2 + 3446	open	173	10.9	Near	47
0928.6 + 3617	medium compact	69	1.1	ED	25
0928.7 + 3456	medium compact	122	1.7	VD	49
0929.0 + 3805	medium compact	76	1.3	VD	16
0929.6 + 3257	compact	82	0.9	ED	48
0929.9 + 3601	medium compact	104	2.2	D	24
0930.4 + 3620	medium compact	53	0.9	ED	23
0932.2 + 3147	open	450	9.6	MD	2
0932.5 + 3249	open	72	1.1	ED	46
0932.5 + 3400	open	95	1.4	ED	45
0932.9 + 3430	medium compact	85	1.1	ED	44
0932.9 + 3825	open	207	5.7	D	15
0933.5 + 3451	open	139	1.5	ED	43
0933.6 + 3250	compact	91	1.2	ED	3
0934.8 + 3335	compact	52	0.5	ED	42
0936.0 + 3329	open	69	1.7	VD	41
0936.0 + 3752	compact	99	1.3	VD	14
0936.7 + 3316	medium compact	64	0.9	ED	40
0936.9 + 3812	compact	272	2.2	ED	13
0938.7 + 3620	medium compact	100	1.4	ED	12
0938.8 + 3425	open	69	1.0	ED	6
0939.5 + 3245	open	100	2.5	MD	4
0940.1 + 3606	open	107	1.6	ED	11
0940.5 + 3722	medium compact	47	0.7	ED	10
0940.6 + 3334	medium compact	104	1.3	ED	5
0942.0 + 3425	open	110	3.2	D	7

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0945.0 + 3441	open	475	19.8	MD	9
Average number of galaxies per cluster = 127.7					
GALAXIES					
Position a 1950 $\delta$	NGC IC*	$m_p$	$V_s$ km/sec	Remarks	
h   m       o   '					
9 11.2 + 36 31		15.6			
9 11.3 + 36 18		15.0			
9 11.4 + 35 55		15.6			
9 11.5 + 36 17		15.5			
9 13.3 + 33 02		15.7			
9 13.7 + 34 39	2793	13.9		eccentric nucleus	
9 14.9 + 34 43		15.7			
9 15.3 + 33 46		15.6			
9 15.3 + 34 04		15.6			
9 15.5 + 32 28		15.6			
9 15.5 + 34 04		15.6			
9 15.5 + 34 30		15.5			
9 15.5 + 34 46		15.4			
9 15.7 + 34 35		15.7			
9 16.2 + 34 04	2827	15.6			
9 16.2 + 34 13	2823	15.7			
9 16.3 + 33 57	2825	15.3			
9 16.4 + 33 50	2826	14.6			
9 16.4 + 34 31		15.6			
9 16.5 + 32 52		15.7			
9 16.5 + 34 05	2828	15.7			
9 16.6 + 33 38		15.6			
9 16.7 + 33 57	2830	15.4			
9 16.8 + 33 58	2831+2832	13.3 *)		double system in halo	
9 16.8 + 37 23	2461*	15.1			
9 16.9 + 33 08		15.3			
9 16.9 + 34 08	2833	15.6			
9 17.0 + 33 13		15.7			
9 17.0 + 33 55	2834	15.6		compact	
9 17.6 + 33 17		15.5			
9 17.6 + 33 52	2839	15.3		compact	
9 17.8 + 35 35	2840	14.8			
9 18.8 + 33 37		14.6		very compact	
9 18.9 + 33 13		15.6		compact	
9 19.1 + 34 03		14.5		compact	
9 19.2 + 34 08		15.7			
9 20.2 + 34 56		15.7		diffuse	
9 20.5 + 33 58		15.4			
9 20.7 + 35 42		15.5			
9 21.3 + 34 44	2859	11.8	+1694		
9 21.7 + 34 00		15.5		compact	
9 21.9 + 33 57		15.6			
9 22.7 + 34 30		15.7		extremely diffuse spiral	
9 23.0 + 34 52		15.3			
9 24.2 + 34 39		15.7			
9 24.8 + 32 52		15.4			
9 26.4 + 36 25		15.2			
9 27.0 + 34 27		15.7			
9 27.1 + 34 53		15.5			

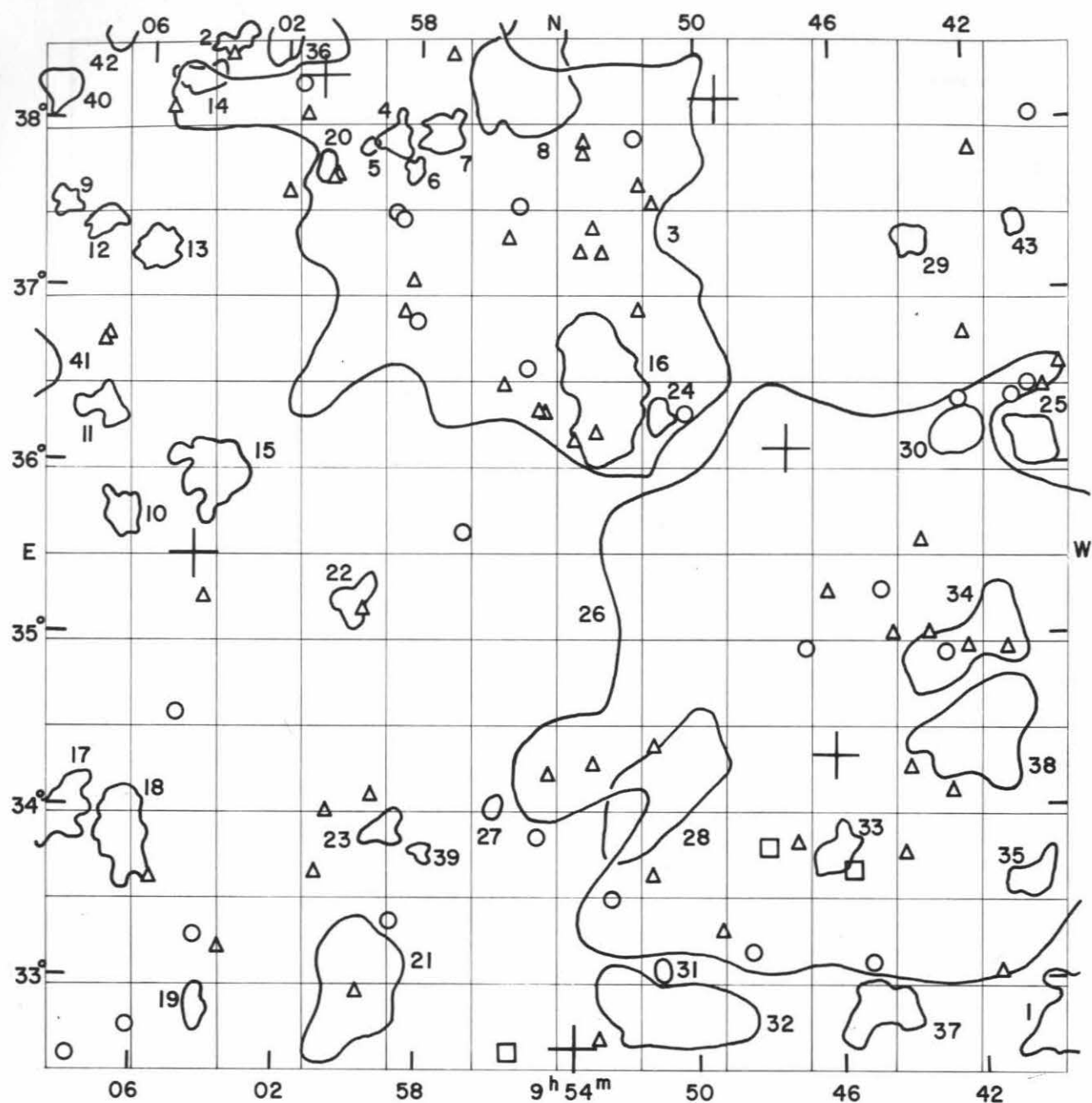


Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
9	27.1	+ 36	54		15.2		
9	28.8	+ 35	46		15.5		
9	29.0	+ 35	45		15.4		
9	29.5	+ 32	45		15.6		
9	30.2	+ 34	08		15.3		
9	30.4	+ 34	16		15.2		
9	30.5	+ 33	53		15.3		compact
9	30.6	+ 33	50		15.6		
9	30.9	+ 34	17		15.7		
9	31.0	+ 34	13		15.1		
9	31.3	+ 34	55		15.7		
9	32.2	+ 34	13		15.2		
9	32.2	+ 34	57	2491*	15.0		
9	32.4	+ 35	13		15.1		
9	33.2	+ 37	28		15.4		
9	33.2	+ 37	35	2493*	15.0		
9	33.8	+ 37	55	2922	14.6		
9	34.0	+ 38	18		14.5		
9	34.2	+ 34	02		15.7		
9	34.3	+ 35	27		15.7		
9	34.4	+ 35	49		15.2		
9	34.5	+ 33	04	2926	14.4		
9	34.6	+ 35	26		15.5		
9	35.7	+ 34	57	2496*	15.5		
9	35.8	+ 35	09		15.7		
9	35.9	+ 34	32		15.1		
9	36.1	+ 34	14	2942	14.1		
9	36.2	+ 36	47		15.3		
9	36.3	+ 32	33	2944	14.7		
9	36.3	+ 36	48		15.4		
9	36.4	+ 32	36		14.3		double system, twisted streamer
9	36.5	+ 34	05		14.8		
9	38.2	+ 36	07	2955	13.9		
9	39.3	+ 36	35	2500*	15.2		
9	39.8	+ 36	26		15.7		compact
9	39.9	+ 38	03		14.9		
9	40.2	+ 36	28	2965	14.7		
9	40.7	+ 36	24	2971	15.0		

\*) 2831:  $m_p = 14.7$ ,  $V_s = + 5155$ ; 2832:  $m_p = 13.6$ ,  $V_s = + 6946$ .

#### MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2831	-	-	14.71	E1	14.8	E1	-	-
2832	-	-	13.81	E3	13.5	E2	-	-
2859	11.9	SBa	11.91	SB0	12.0	SB0	-	-



FIELD No. 182

$9^{\text{h}}54^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 1345

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
13510	9	46	04.5	+	34	19 09	7.10
13538	9	47	21.7	+	36	06 28	7.29
13573	9	49	20.2	+	38	09 00	6.74
13673	9	53	35.7	+	32	37 20	6.60
13816	10	00	54.5	+	38	15 53	6.82
13896	10	04	29.2	+	35	29 21	4.47

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0939.5 + 3245	open	100	2.5	MD	1
0940.1 + 3606	open	107	1.6	ED	25
0940.5 + 3722	medium compact	47	0.7	ED	43
0940.6 + 3334	medium compact	104	1.3	ED	35
0942.0 + 3425	open	110	3.2	D	38
0942.3 + 3457	medium compact	112	3.1	MD	34
0942.4 + 3610	compact	102	1.5	ED	30
0943.6 + 3718	compact	59	0.9	ED	29
0945.0 + 3251	open	76	2.0	ED	37
0945.0 + 3441	open	475	19.8	MD	26
0946.1 + 3345	open	87	1.4	ED	33
0950.6 + 3250	open	87	3.4	D	32
0951.0 + 3303	compact	47	0.5	ED	31
0951.0 + 3407	medium compact	131	3.6	D	28
0951.0 + 3617	compact	97	0.7	ED	24
0952.6 + 3622	medium compact	195	3.5	VD	16
0955.0 + 3815	open	107	3.6	D	8
0955.8 + 3401	compact	59	0.5	ED	27
0956.4 + 3730	open	347	14.4	Near	3
0957.4 + 3757	medium compact	63	1.3	VD	7
0957.8 + 3345	compact	46	0.5	ED	39
0958.2 + 3744	compact	58	0.6	ED	6
0958.8 + 3755	compact	61	1.1	VD	4
0959.0 + 3354	open	92	1.2	ED	23
0959.6 + 3257	open	132	3.4	MD	21
0959.7 + 3752	compact	40	0.4	ED	5
0959.9 + 3512	medium compact	84	1.3	ED	22
1000.9 + 3745	medium compact	79	0.8	ED	20
1002.1 + 3830	medium compact	98	1.3	VD	36
1003.6 + 3829	medium compact	58	1.0	VD	2
1003.9 + 3557	compact	193	2.2	D	15
1004.2 + 3250	compact	87	1.0	ED	19
1004.7 + 3814	medium compact	62	1.2	ED	14
1005.8 + 3715	medium compact	70	1.3	ED	13
1006.3 + 3349	open	108	2.2	ED	18
1006.5 + 3541	open	62	1.2	VD	10
1007.1 + 3834	medium compact	71	1.0	ED	42
1007.2 + 3619	medium compact	66	1.3	VD	11
1007.4 + 3724	medium compact	82	1.1	ED	12
1008.5 + 3354	medium compact	139	2.2	D	17
1008.5 + 3730	medium compact	66	0.9	ED	9
1008.9 + 3811	open	88	1.3	ED	40
1009.7 + 3630	medium compact	90	2.2	D	41

Average number of galaxies per cluster = 103.3

## GALAXIES

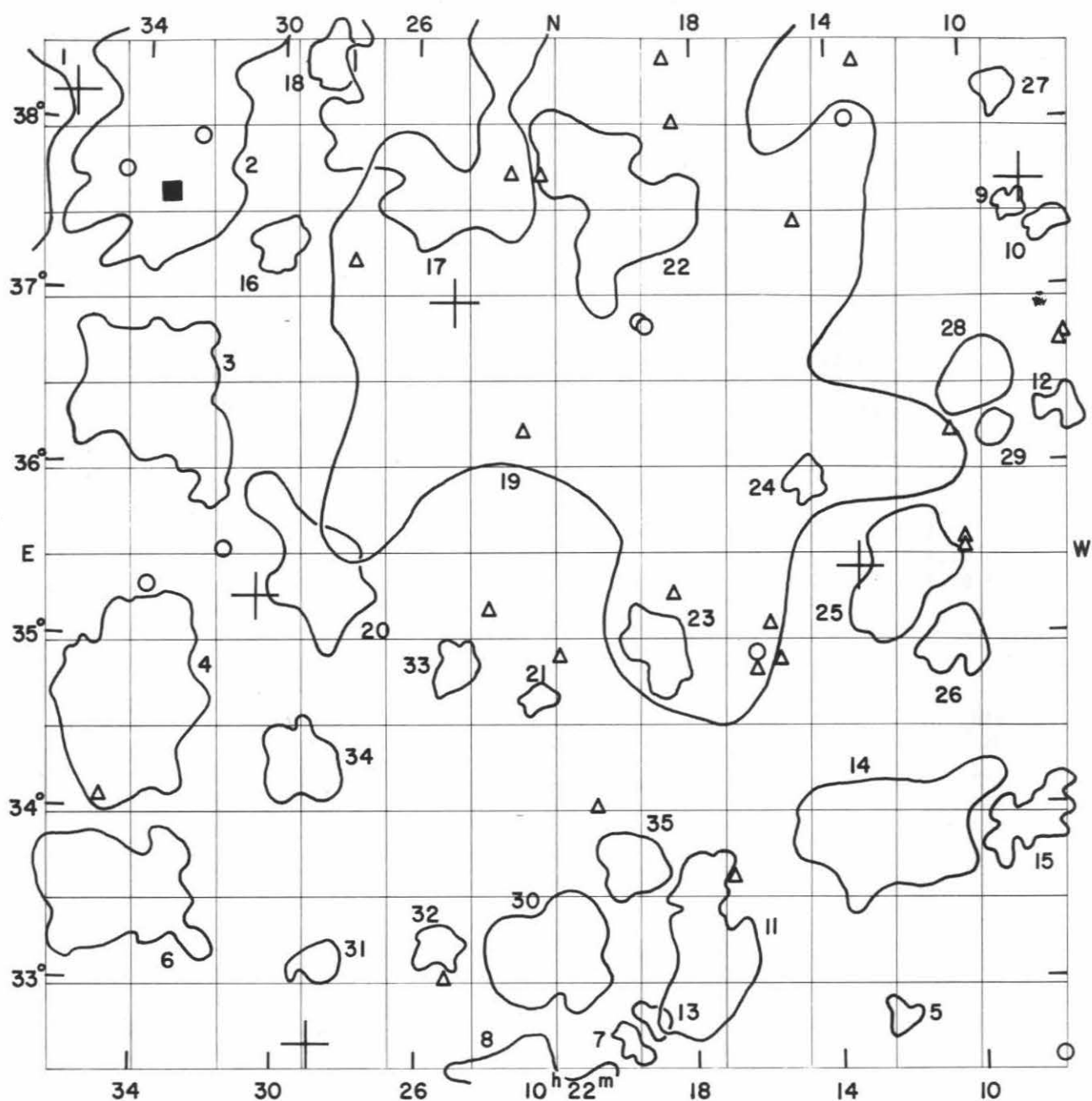
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
9	39.3	+36 35	2500*	15.2		
9	39.8	+36 26		15.7		compact
9	39.9	+38 03		14.9		
9	40.2	+36 28	2965	14.7		
9	40.7	+36 24	2971	15.0		

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
9	41.1	+ 34 55		15.2		
9	41.6	+ 33 02		15.2		
9	41.8	+ 37 50		15.5		
9	42.1	+ 36 45		15.3		
9	42.2	+ 34 56		15.4		
9	42.3	+ 36 23		15.0		
9	42.8	+ 34 05		15.5		
9	42.8	+ 34 55		14.7		
9	43.3	+ 35 01		15.7		
9	43.5	+ 35 33		15.5		
9	43.9	+ 34 14		15.4		double system, faint bridge
9	44.1	+ 33 44	2508*	15.7		
9	44.3	+ 35 00		15.2		
9	44.7	+ 35 17		14.9		
9	45.1	+ 33 06		14.8		very compact
9	45.6	+ 33 39	3003	12.3	+1476	$m_H = 12.5$ Sc
9	46.2	+ 35 16		15.7		
9	46.8	+ 34 56	3012	14.9		compact
9	47.1	+ 33 48	3013	15.6		
9	48.0	+ 33 47	3021	12.6		$m_H = 12.7$ Sc
9	48.5	+ 33 10		14.7		
9	49.3	+ 33 17		15.2		
9	50.3	+ 36 18		14.9		
9	51.2	+ 33 37		15.7		
9	51.2	+ 34 22		15.4		
9	51.2	+ 37 46		15.6		
9	51.6	+ 36 54		15.6		
9	51.6	+ 37 38	2515*	15.1		
9	51.8	+ 37 55	2516*	15.0		
9	52.4	+ 33 30		14.5		
9	52.7	+ 37 15		15.5		
9	52.8	+ 32 40		15.6		
9	52.9	+ 36 12		15.7		
9	53.0	+ 34 16	2519*	15.6		compact
9	53.0	+ 37 23	2518*	15.6		compact
9	53.2	+ 37 49		15.4		compact
9	53.2	+ 37 53		15.7		
9	53.4	+ 37 15		15.3		
9	53.5	+ 36 09		15.6		
9	54.2	+ 34 13	2521*	15.3		
9	54.3	+ 36 18		15.7		
9	54.5	+ 33 51	2524*	14.8		compact
9	54.5	+ 36 19		15.5		
9	54.9	+ 36 35		15.0		double system in halo
9	55.1	+ 37 31		14.5		
9	55.4	+ 32 37	3067	12.7	+1506	$m_H = 12.8$ S
9	55.4	+ 37 20	2525*	15.7		very compact
9	55.5	+ 36 30		15.6		diffuse
9	56.7	+ 35 38	3074	14.8		
9	57.1	+ 38 24	2527*	15.2		
9	58.0	+ 36 51		14.7		
9	58.2	+ 37 05		15.5		compact
9	58.4	+ 36 54		15.3		
9	58.5	+ 37 26	2530*	15.0		
9	58.7	+ 37 29		14.9		
9	58.8	+ 33 22		14.9		
9	59.3	+ 34 05		15.3		
9	59.6	+ 35 10		15.6		
9	59.7	+ 32 56	3099	15.4		

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
10	00.5	+ 37 42		15.7		
10	00.6	+ 34 00		15.4		
10	00.6	+ 37 41		15.5		
10	00.9	+ 33 39		15.2		
10	01.4	+ 38 03		15.6		
10	01.5	+ 38 14	2535*	14.6		
10	01.9	+ 37 35		15.1		
10	03.6	+ 33 11		15.3		
10	03.7	+ 38 24		15.5		diffuse spiral
10	04.2	+ 35 14		15.4		
10	04.3	+ 33 16	3118	14.4		
10	04.9	+ 34 33	2542*	14.6		
10	05.4	+ 38 05	2543*	15.7		double system
10	05.5	+ 33 36	2544*	15.1		
10	06.1	+ 32 45		15.0		
10	07.1	+ 36 45	2547*	15.7		
10	07.2	+ 36 42	2549*	15.6		
10	07.8	+ 32 33		15.0		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3003	-	-	12.27	Sc	12.0	Sb	12.04	Sc
3067	-	-	12.51	Sbp	12.6	Sb	-	-



FIELD No. 183

$10^{\text{h}}22^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 1032

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
13985	10	08	15.4	+ 37 38 57	6.14
14082	10	13	14.8	+ 35 24 50	7.32
14358	10	24	59.9	+ 36 57 51	4.41
14455	10	29	01.4	+ 32 38 12	5.83
14501	10	30	39.7	+ 35 14 48	5.58
14634	10	36	16.5	+ 38 10 17	5.83

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1007.2 + 3619	medium compact	66	1.3	VD	12
1007.4 + 3724	medium compact	82	1.1	ED	10
1008.5 + 3354	medium compact	139	2.2	D	15
1008.5 + 3730	medium compact	66	0.9	ED	9
1008.9 + 3811	open	88	1.3	ED	27
1009.2 + 3612	medium compact	50	1.0	ED	29
1009.7 + 3630	medium compact	90	2.2	D	28
1010.5 + 3458	medium compact	88	1.9	D	26
1012.0 + 3522	open	105	3.2	MD	25
1012.3 + 3246	compact	132	1.0	ED	5
1012.5 + 3350	compact	303	4.8	MD	14
1014.7 + 3555	compact	85	1.3	ED	24
1017.6 + 3310	medium compact	144	4.0	D	11
1019.0 + 3455	compact	100	2.1	D	23
1019.2 + 3246	compact	64	1.0	ED	13
1019.8 + 3233	compact	93	1.1	ED	7
1019.8 + 3341	medium compact	159	2.0	VD	35
1019.8 + 3653	medium compact	456	18.3	Near	19
1020.2 + 3733	medium compact	287	4.6	MD	22
1022.1 + 3310	compact	195	3.8	ED	30
1022.5 + 3439	compact	71	0.9	VD	21
1022.7 + 3218	open	224	3.9	VD	8
1024.9 + 3450	compact	106	1.5	VD	33
1025.4 + 3312	medium compact	82	1.5	ED	32
1025.5 + 3803	medium compact	431	7.3	MD	17
1028.7 + 3822	medium compact	85	1.8	VD	18
1028.8 + 3306	medium compact	104	1.4	ED	31
1028.9 + 3521	medium compact	210	3.6	D	20
1029.3 + 3416	medium compact	240	2.2	ED	34
1030.1 + 3717	open	57	1.7	VD	16
1033.3 + 3804	open	198	7.0	Near	2
1033.9 + 3624	medium compact	220	5.1	MD	3
1034.4 + 3435	compact	268	5.5	MD	4
1034.5 + 3329	open	260	4.6	D	6
1038.5 + 3802	open	189	5.2	MD	1

Average number of galaxies per cluster = 158.2

## GALAXIES

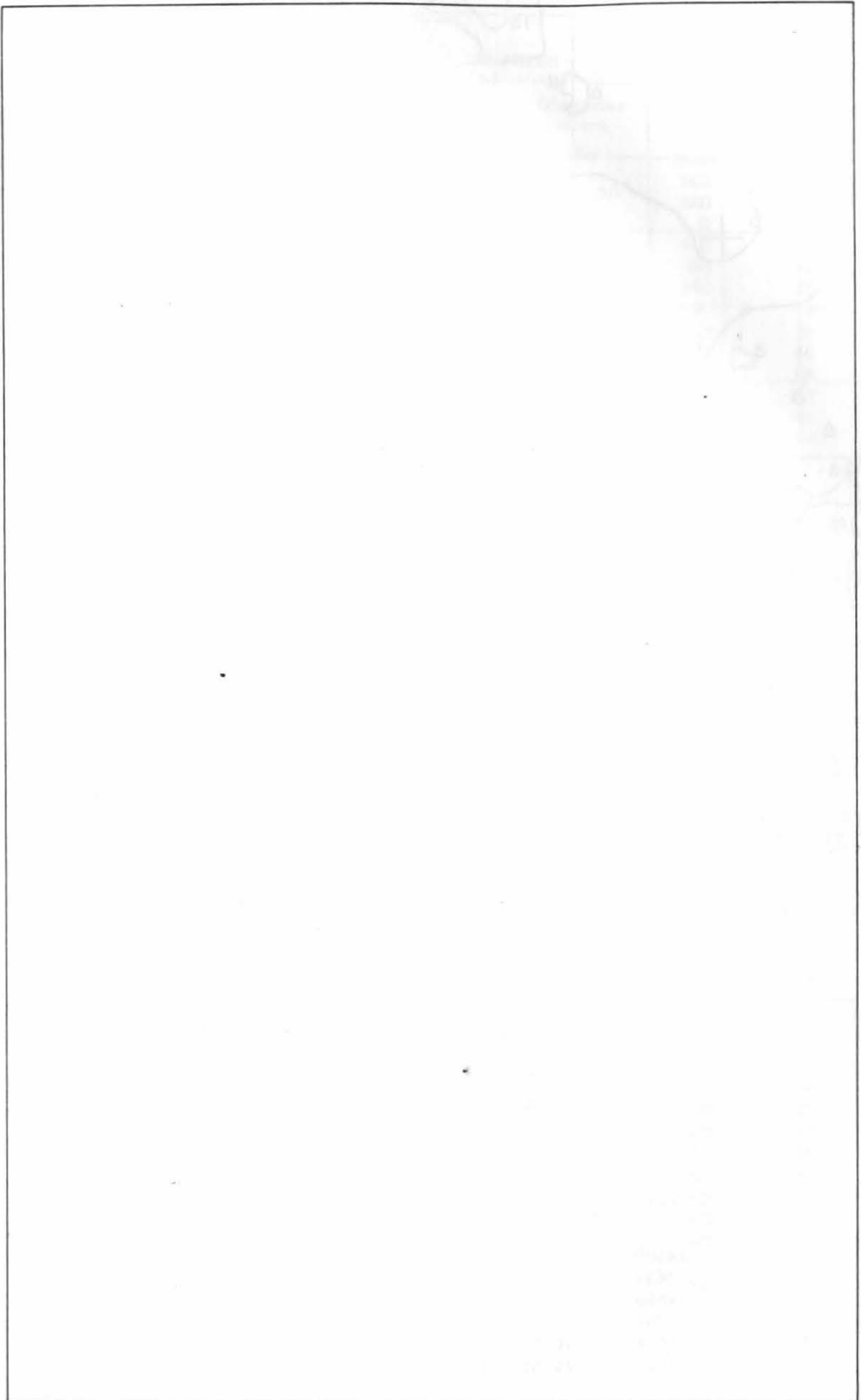
Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
10	07.1	+36 45	2547*	15.7		
10	07.2	+36 42	2549*	15.6		
10	07.8	+32 33		15.0		
10	10.2	+35 31		15.5		
10	10.2	+35 33		15.7		
10	10.5	+36 12		15.5		
10	13.1	+38 21	2557*	15.7		
10	13.4	+38 01		14.6		
10	15.0	+37 25		15.5		compact
10	15.5	+34 52		15.6		
10	15.9	+35 05		15.2		
10	16.2	+34 49		15.6		compact
10	16.2	+34 55	2561*	14.9		

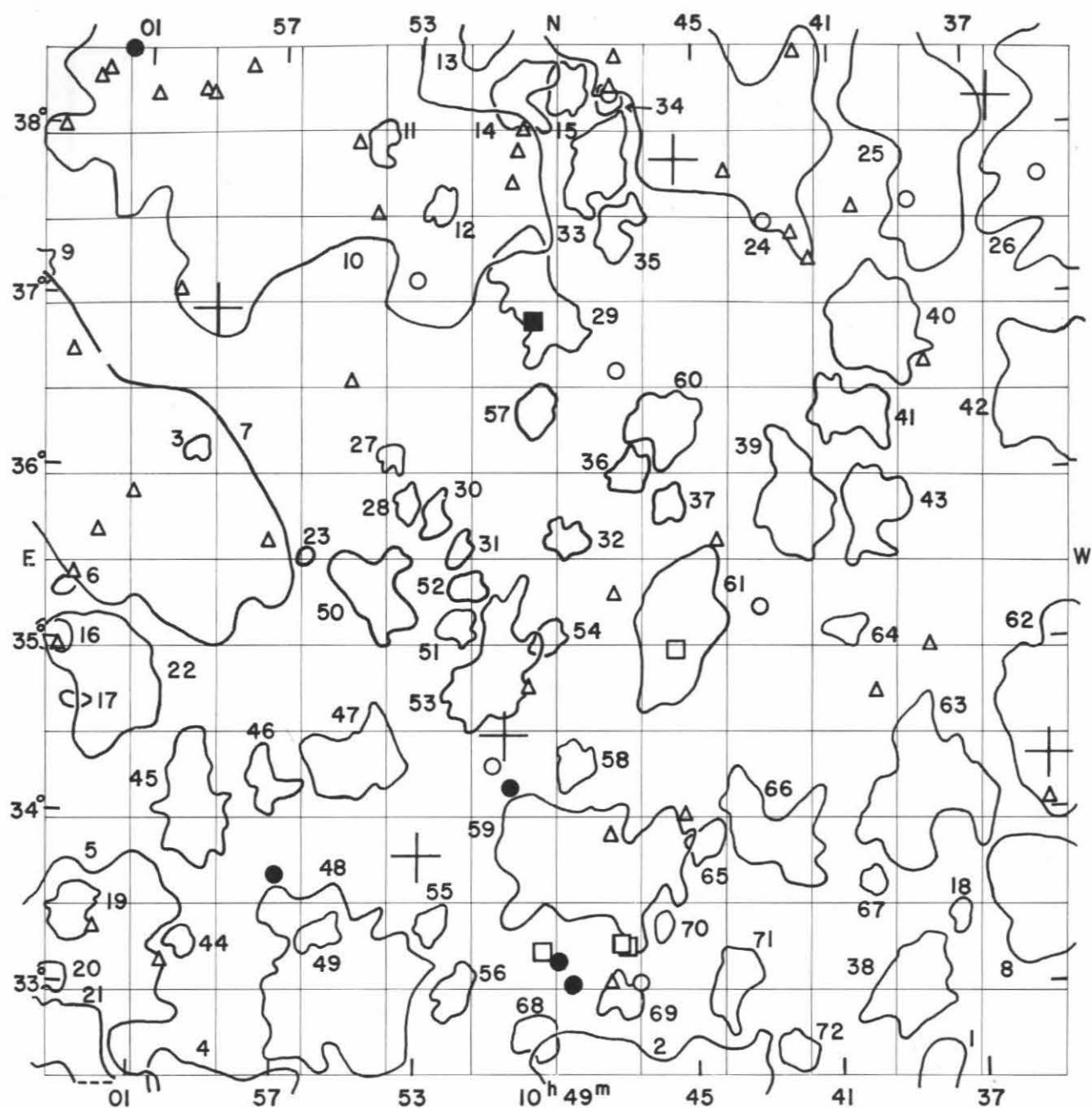
Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
10	17.0	+33 37		15.6		
10	18.5	+38 00		15.4		
10	18.6	+35 17		15.7		
10	18.9	+38 22		15.5		
10	19.4	+36 50	2566*	14.9		
10	19.6	+36 51	2568*	15.0		double system
10	20.8	+34 01		15.4		
10	21.9	+34 54		15.3		
10	22.4	+37 42		15.6		compact
10	23.0	+36 12		15.7		
10	23.3	+37 43		15.1		
10	23.9	+35 11		15.1		
10	25.1	+33 01	2577*	15.3		
10	27.9	+37 13		15.5		very compact
10	31.6	+35 30		14.1		
10	32.5	+37 55		15.0		
10	33.3	+37 35	3294	11.5	+1469	$m_H = 11.6$ Sc
10	33.8	+35 18	2591*	14.5		
10	34.7	+37 43	3304	14.4		
10	35.0	+34 05		15.7		diffuse

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956	Holmberg 1958	
3294	-	-	-	-	-	Sc	-







FIELD No. 184

10<sup>h</sup>49<sup>m</sup> + 35°30'

Survey Plate No. 731

# GC STARS

Nos.	R.A.			Decl.	m <sub>p</sub>
	h	m	s		
14609	10	35	02.4	+ 34 20 19	6.65
14634	10	36	16.5	+ 38 10 17	5.83
14866	10	45	33.6	+ 37 50 05	6.89
14961	10	50	31.3	+ 34 29 05	3.92
15018	10	52	58.5	+ 33 46 27	5.23
15147	10	58	59.1	+ 36 56 47	7.31

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1033.3 + 3804	open	198	7.0	Near	26
1033.9 + 3624	medium compact	220	5.1	MD	42
1034.4 + 3435	compact	268	5.5	MD	62
1034.5 + 3329	open	260	4.6	D	8
1037.3 + 3134	open	207	6.3	MD	1
1037.7 + 3322	medium compact	82	0.8	ED	18
1038.5 + 3802	open	189	5.2	MD	25
1038.6 + 3406	medium compact	112	4.2	MD	63
1039.0 + 3258	medium compact	99	2.7	D	38
1039.7 + 3650	compact	225	3.2	D	40
1039.9 + 3545	open	94	2.2	D	43
1040.1 + 3335	compact	66	0.8	ED	67
1040.5 + 3620	medium compact	150	2.1	D	41
1040.8 + 3504	medium compact	75	1.0	ED	64
1042.1 + 3547	compact	263	2.9	MD	39
1042.2 + 3236	medium compact	94	1.2	VD	72
1042.4 + 3910	medium compact	344	12.7	Near	24
1042.8 + 3353	open	106	3.0	MD	66
1044.0 + 3300	medium compact	112	1.9	D	71
1044.8 + 3350	open	99	1.2	VD	65
1045.6 + 3504	medium compact	212	3.5	MD	61
1045.8 + 3155	medium compact	481	7.6	MD	2
1045.8 + 3548	compact	137	1.1	ED	37
1045.9 + 3615	open	102	2.2	VD	60
1046.0 + 3320	medium compact	63	0.7	ED	70
1046.9 + 3559	compact	126	1.3	ED	36
1047.1 + 3256	open	116	1.3	D	69
1047.3 + 3725	medium compact	120	1.6	VD	35
1047.6 + 3809	open	70	0.8	ED	34
1047.8 + 3747	open	99	2.3	D	33
1048.0 + 3343	open	252	5.1	MD	59
1048.5 + 3417	medium compact	126	1.3	ED	58
1048.8 + 3535	medium compact	152	1.3	ED	32
1048.8 + 3813	open	76	1.6	VD	15
1049.2 + 3501	compact	104	1.0	ED	54
1049.6 + 3242	medium compact	67	1.4	VD	68
1049.6 + 3700	open	165	3.1	D	29
1049.7 + 3620	medium compact	148	1.4	D	57
1050.2 + 3810	medium compact	86	2.0	D	14
1050.9 + 3451	open	176	3.1	D	53
1051.2 + 3838	compact	159	2.2	D	13
1051.6 + 3519	medium compact	90	1.0	VD	52
1051.8 + 3531	medium compact	94	0.9	ED	31
1051.9 + 3258	medium compact	70	1.5	D	56
1051.9 + 3505	open	110	1.1	ED	51
1052.5 + 3320	medium compact	90	1.1	VD	55
1052.5 + 3544	medium compact	97	1.1	VD	30
1052.5 + 3731	medium compact	92	1.0	ED	12
1053.3 + 3548	open	74	1.0	ED	28
1053.8 + 3605	medium compact	73	0.8	ED	27
1054.1 + 3753	medium compact	101	1.2	ED	11
1054.2 + 3517	open	139	2.3	VD	50
1054.8 + 3419	open	150	2.7	VD	47
1055.0 + 3259	open	277	5.3	MD	48
1055.7 + 3317	medium compact	114	1.2	VD	49
1056.3 + 3529	compact	56	0.5	ED	23
1057.1 + 3411	medium compact	97	1.6	ED	46

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1057.2 + 3804	open	535	13.2	Near	10
1059.3 + 3401	open	114	2.9	D	45
1059.4 + 3606	compact	52	0.7	ED	3
1059.6 + 3315	medium compact	80	0.9	VD	44
1101.9 + 3446	medium compact	258	3.8	VD	22
1102.1 + 3136	medium compact	281	8.8	Near	4
1102.7 + 3325	open	90	1.7	D	19
1102.8 + 3437	compact	63	0.6	ED	17
1103.0 + 3239	open	146	3.3	VD	21
1103.1 + 3300	medium compact	83	0.9	ED	20
1103.1 + 3517	medium compact	72	0.6	ED	6
1103.5 + 3500	medium compact	88	1.2	VD	16
1104.4 + 3708	medium compact	66	0.9	VD	9
1105.5 + 3257	medium compact	885	10.9	MD	5
1107.7 + 3610	open	293	13.9	Near	7

Average number of galaxies per cluster = 154.6

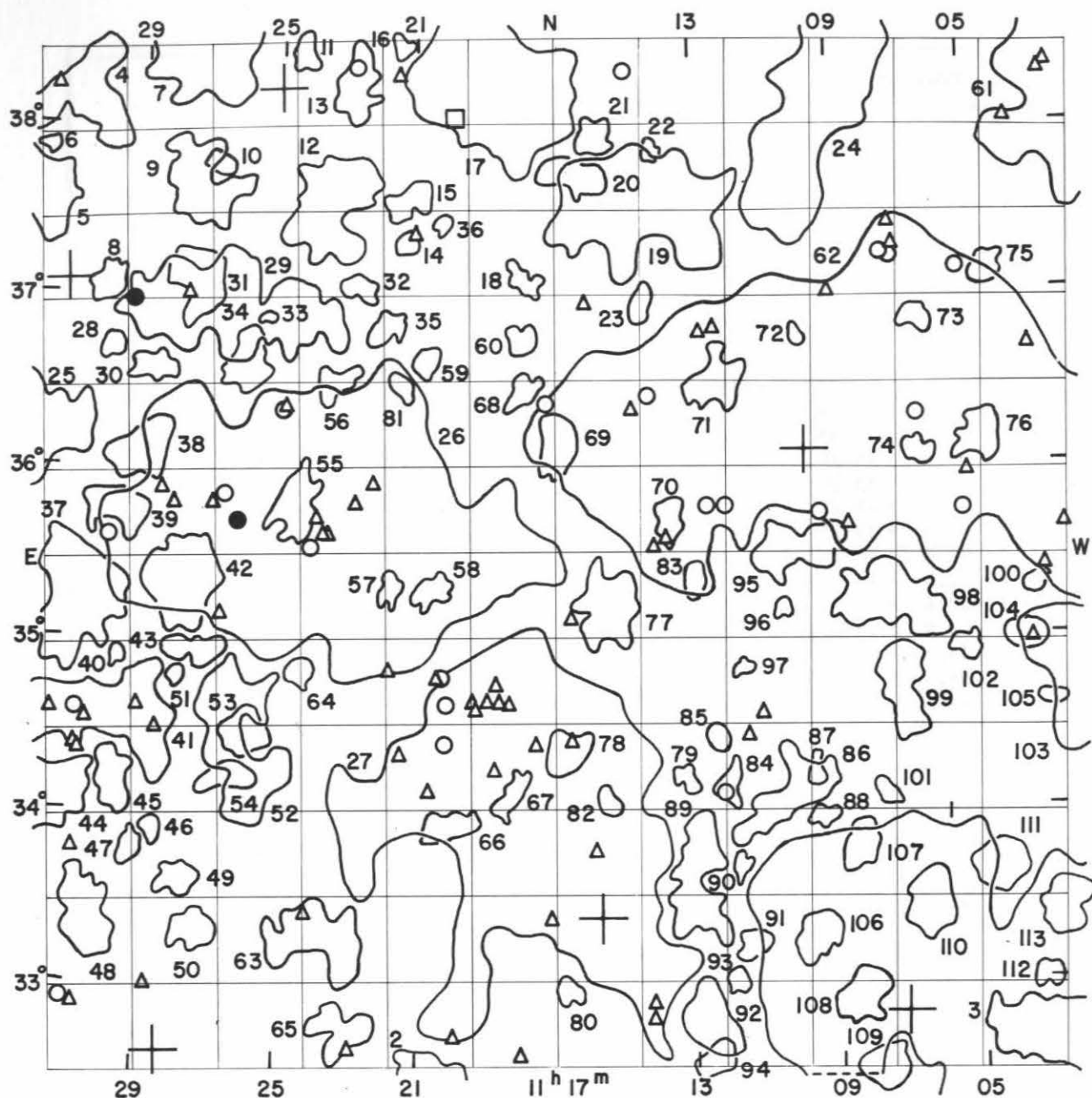
#### GALAXIES

Position a 1950 $\delta$ h m o			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
10 34.7	+ 37 43		3304	14.4		
10 35.0	+ 34 05			15.7		diffuse
10 38.3	+ 34 59			15.7		
10 38.3	+ 36 38			15.3		
10 38.6	+ 37 34		3334	14.1		
10 39.8	+ 34 43			15.1		large, disrupted spiral
10 40.3	+ 37 31			15.6		
10 41.6	+ 37 15			15.6		
10 42.0	+ 38 26			15.1		
10 42.1	+ 37 23			15.7		
10 42.9	+ 37 28			15.0		
10 43.1	+ 35 14			14.3		
10 44.1	+ 37 45			15.6		
10 44.4	+ 35 36			15.2		
10 45.3	+ 34 00			15.6		
10 45.6	+ 34 58		3381	12.8		
10 46.6	+ 33 02		2604*	15.0		
10 47.0	+ 33 14		3395	12.1	+1751	$m_H = 12.4$ Sc
10 47.1	+ 33 15		3396	12.6	+1643	$m_H = 12.8$ Sc
10 47.2	+ 36 36			14.4		
10 47.3	+ 38 25			15.4		
10 47.4	+ 33 01		2608*	15.6		
10 47.4	+ 35 17			15.6		
10 47.5	+ 33 53			15.5		
10 47.5	+ 38 13		2606*	14.8		
10 47.5	+ 38 15		2607*	15.3		
10 48.5	+ 33 01		3413	13.1		
10 48.9	+ 33 10		3424	13.2		
10 49.4	+ 33 13		3430=2613*	12.2	+1742	$m_H = 12.4$ Sc
10 49.7	+ 36 53		3432	11.7	+ 609	$m_H = 12.2$ Sc
10 49.8	+ 34 45			15.1		
10 50.0	+ 38 00			15.7		
10 50.1	+ 37 52			15.1		
10 50.3	+ 34 10		3442	13.2		
10 50.3	+ 37 41			15.5		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	i				
10	50.8	+ 34	17		14.7		
10	53.0	+ 37	07		14.6		
10	54.3	+ 37	30		15.7		
10	54.9	+ 37	55		15.2		
10	55.0	+ 36	31		15.5		
10	56.9	+ 33	39		13.3		
10	57.3	+ 35	35		15.1		
10	58.0	+ 38	21		15.4		
10	59.2	+ 38	12	2615*	15.5		
10	59.4	+ 38	13	2619*	15.7		
11	00.0	+ 37	02		15.5		
11	00.1	+ 33	08		15.4		
11	00.8	+ 38	10		15.6		
11	01.2	+ 35	51		15.7		
11	01.7	+ 38	28		13.1		extremely compact
11	02.0	+ 33	19		15.7		
11	02.2	+ 35	38		15.3		
11	02.3	+ 38	20		15.4		
11	02.6	+ 38	17		15.5		extremely faint jets
11	02.9	+ 35	23		15.5		
11	03.1	+ 36	40		15.3		
11	03.3	+ 34	58		15.7		
11	03.6	+ 38	00		15.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3395	-	-	-	-	-	Sc	-	-
3396	-	-	-	-	-	Sc	-	-
3430	-	-	12.20	Sc	12.0	Sc	-	-
3432	-	-	-	-	-	Sc	11.59	Sc+



FIELD No. 185

11<sup>h</sup> 17<sup>m</sup> + 35° 30'

Survey Plate No. 695

# GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	o	i	"	
15345	11	07	12.6	+	32	48 08	7.26
15397	11	09	49.3	+	36	05 17	6.32
15547	11	15	47.0	+	33	22 02	3.71
15721	11	25	03.8	+	38	12 54	7.20
15794	11	28	23.0	+	32	35 23	7.30
15857	11	31	17.1	+	37	05 33	6.33

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1057.2 + 3804	open	535	13.2	Near	61
1101.9 + 3446	medium compact	258	3.8	VD	103
1102.7 + 3325	open	90	1.7	D	113
1102.8 + 3437	compact	63	0.6	ED	105
1103.0 + 3239	open	146	3.3	VD	3
1103.1 + 3300	medium compact	83	0.9	ED	112
1103.1 + 3517	medium compact	72	0.6	ED	100
1103.5 + 3500	medium compact	88	1.2	VD	104
1104.4 + 3339	medium compact	90	1.7	VD	111
1104.4 + 3708	medium compact	66	0.9	VD	75
1104.7 + 3610	medium compact	92	1.5	VD	76
1105.2 + 3455	medium compact	121	0.9	ED	102
1105.5 + 3257	medium compact	885	10.9	MD	1
1106.4 + 3326	compact	150	1.8	VD	110
1106.5 + 3605	medium compact	83	0.8	VD	74
1106.5 + 3650	compact	91	0.9	ED	73
1107.1 + 3441	compact	242	2.0	VD	99
1107.3 + 3513	medium compact	345	2.8	VD	98
1107.6 + 3405	compact	87	0.7	ED	101
1107.7 + 3610	open	293	13.9	Near	62
1107.8 + 3230	medium compact	88	1.6	VD	109
1108.4 + 3255	medium compact	85	1.7	D	108
1108.4 + 3347	medium compact	77	1.3	VD	107
1109.1 + 3806	compact	206	4.7	Near	24
1109.4 + 3358	compact	93	0.8	VD	88
1109.6 + 3315	medium compact	98	1.5	VD	106
1109.6 + 3414	medium compact	74	0.8	ED	87
1110.0 + 3530	open	138	1.9	VD	95
1110.0 + 3646	compact	62	0.5	ED	72
1110.3 + 3404	open	108	2.4	D	86
1110.5 + 3510	compact	48	0.5	ED	96
1111.4 + 3313	compact	103	0.9	VD	91
1111.6 + 3450	compact	62	0.5	ED	97
1111.8 + 3340	medium compact	73	0.6	ED	90
1111.9 + 3300	compact	73	0.8	VD	93
1112.1 + 3409	medium compact	86	1.1	VD	84
1112.2 + 3630	medium compact	123	1.8	D	71
1112.4 + 3425	medium compact	71	0.7	ED	85
1112.5 + 3233	open	55	1.1	VD	94
1112.7 + 3245	open	90	1.9	D	92
1113.0 + 3335	open	106	2.6	D	89
1113.0 + 3520	compact	97	0.9	ED	83
1113.2 + 3411	compact	62	0.7	ED	79
1113.7 + 3542	compact	97	1.1	VD	70
1114.2 + 3750	medium compact	52	0.5	ED	22
1114.4 + 3733	medium compact	126	4.5	MD	19
1114.5 + 3656	medium compact	78	0.9	ED	23
1115.5 + 3402	medium compact	76	0.8	ED	82
1115.5 + 3511	open	109	2.2	MD	77
1115.9 + 3756	medium compact	53	1.1	VD	21
1116.5 + 3743	medium compact	90	1.6	D	20
1116.6 + 3257	medium compact	65	0.8	VD	80
1116.6 + 3420	open	98	1.4	VD	78
1116.9 + 3607	medium compact	78	1.7	VD	69
1117.6 + 3352	open	290	10.0	Near	27
1117.9 + 3627	medium compact	56	1.0	ED	68
1117.9 + 3704	medium compact	73	0.8	ED	18

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1118.0 + 3644	compact	78	0.9	VD	60
1118.2 + 3405	medium compact	93	1.1	VD	67
1118.8 + 3812	medium compact	161	4.9	MD	17
1120.0 + 3355	medium compact	84	1.3	ED	66
1120.1 + 3222	medium compact	233	2.2	D	2
1120.3 + 3725	compact	62	0.5	ED	36
1120.5 + 3517	medium compact	88	1.1	ED	58
1120.7 + 3636	compact	98	0.8	VD	59
1121.3 + 3717	medium compact	62	0.7	ED	14
1121.3 + 3733	medium compact	120	1.2	VD	15
1121.4 + 3627	medium compact	56	0.8	VD	81
1121.6 + 3827	medium compact	68	0.6	ED	16
1121.8 + 3517	medium compact	77	0.9	ED	57
1121.9 + 3648	open	63	1.0	VD	35
1122.7 + 3702	medium compact	76	0.9	ED	32
1122.9 + 3811	open	93	1.7	VD	13
1123.1 + 3243	medium compact	97	1.7	D	65
1123.4 + 3630	compact	60	1.2	ED	56
1123.6 + 3732	medium compact	166	3.0	D	12
1123.7 + 3315	open	126	2.7	D	63
1123.9 + 3541	open	260	11.0	Near	26
1124.3 + 3447	open	56	0.9	ED	64
1124.4 + 3546	open	98	1.7	D	55
1124.6 + 3826	medium compact	103	0.9	ED	11
1125.3 + 3652	compact	61	0.4	ED	33
1125.9 + 3427	compact	111	1.4	VD	53
1126.0 + 3425	open	126	3.3	MD	52
1126.0 + 3635	medium compact	77	1.5	VD	34
1126.4 + 3412	medium compact	73	1.2	VD	54
1126.4 + 3656	medium compact	140	4.5	Near	29
1126.9 + 3745	compact	99	0.8	ED	10
1127.1 + 3850	medium compact	659	6.1	D	7
1127.2 + 3318	compact	90	1.3	VD	50
1127.3 + 3456	medium compact	80	1.3	VD	43
1127.4 + 3705	medium compact	144	2.1	VD	31
1127.4 + 3740	medium compact	136	2.6	D	9
1127.7 + 3335	compact	87	1.2	VD	49
1127.7 + 3520	compact	170	2.5	D	42
1127.9 + 3446	medium compact	58	0.5	ED	51
1128.5 + 3353	compact	90	0.7	VD	46
1128.7 + 3635	medium compact	130	1.0	ED	30
1129.0 + 3605	compact	133	1.9	D	38
1129.1 + 3346	medium compact	74	0.9	ED	47
1129.6 + 3410	compact	75	1.4	VD	45
1129.6 + 3453	compact	58	0.5	ED	40
1129.7 + 3545	compact	113	1.7	VD	39
1129.9 + 3643	compact	82	0.7	ED	28
1130.1 + 3703	medium compact	150	1.1	ED	8
1130.2 + 3323	open	97	2.0	VD	48
1130.6 + 3514	open	122	3.3	MD	37
1130.9 + 3435	open	166	4.2	Near	41
1130.9 + 3810	medium compact	142	2.7	D	4
1131.8 + 3404	open	150	2.8	D	44
1132.0 + 3753	compact	53	0.6	ED	6
1132.3 + 3739	compact	200	2.3	D	5
1132.4 + 3615	medium compact	240	3.8	D	25

Average number of galaxies per cluster = 123.6

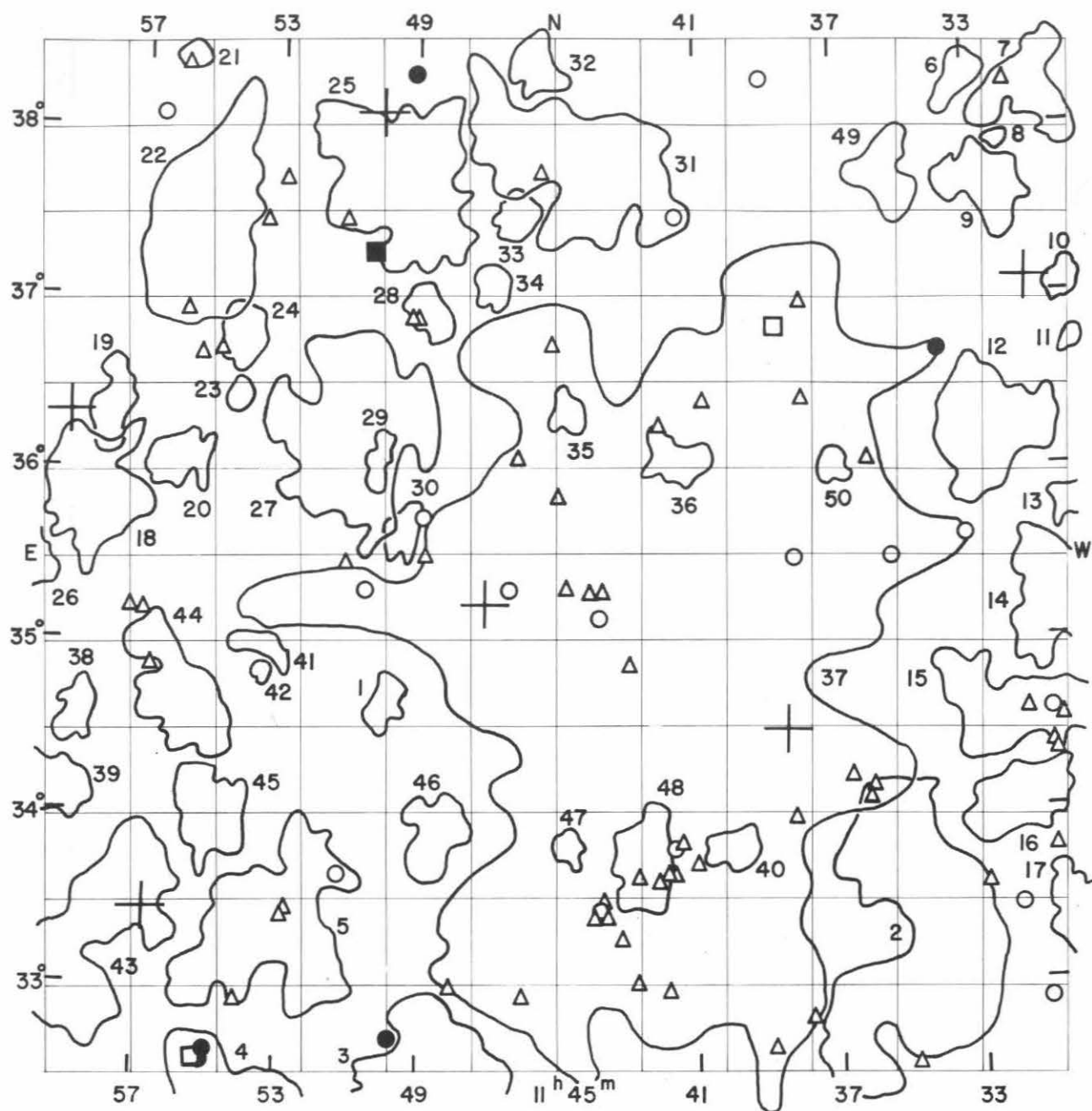


## GALAXIES

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	s				
11	02.2	+35 38		15.3		
11	02.3	+38 20		15.4		
11	02.6	+38 17		15.5		extremely faint jets
11	02.9	+35 23		15.5		
11	03.1	+36 40		15.3		
11	03.3	+34 58		15.7		
11	03.6	+38 00		15.6		
11	05.1	+35 58		15.7		
11	05.2	+35 44		14.9		
11	05.2	+37 08		14.6		
11	06.5	+36 17	3540	14.6		
11	07.1	+37 16		15.5		
11	07.2	+37 13	3542	15.0		
11	07.2	+37 24		15.5		
11	07.4	+37 14	3545	14.8		double system in halo
11	08.5	+35 40		15.2		
11	09.0	+37 00		15.5		
11	09.3	+35 43	3569	14.5		
11	11.1	+34 33		15.6		
11	11.5	+34 26		15.4		
11	12.1	+35 46		14.4		double system
11	12.2	+34 06		14.7		
11	12.3	+36 49		15.7		
11	12.6	+35 46		14.8		
11	12.8	+36 47		15.4		compact
11	13.8	+35 35		15.4		
11	14.2	+32 46		15.7		
11	14.2	+32 52		15.5		compact
11	14.2	+35 31		15.3		double system, faint halo
11	14.3	+36 25		15.0		
11	14.8	+36 20		15.1		
11	14.9	+38 19		14.8		
11	15.9	+33 45		15.6		
11	16.2	+36 56		15.5		
11	16.5	+34 24		15.5		compact
11	16.6	+35 06		15.7		
11	17.1	+33 21		15.2		very compact
11	17.2	+36 22		15.0		
11	17.6	+34 22		15.3		
11	18.0	+32 34		15.3		
11	18.3	+34 37	2735*	15.4		
11	18.6	+34 38	2738*	15.3		compact
11	18.7	+34 44		15.7		
11	18.8	+34 14		15.1		very compact, halo
11	19.0	+34 38	2744*	15.5		compact
11	19.3	+34 36		15.4		
11	19.4	+34 39	2751*	15.7		compact
11	19.9	+32 40		15.4		
11	19.9	+38 02	3652	12.6		
11	20.1	+34 37		14.9		
11	20.2	+34 23		14.6		
11	20.3	+34 47		15.0		
11	20.4	+34 46		15.6		
11	20.6	+34 06		15.5		very compact
11	21.0	+37 21		15.6		
11	21.4	+34 19		15.7		

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
11	21.5	+ 38 16		15.5		compact
11	21.8	+ 34 48		15.5		double system, contact
11	22.3	+ 35 54		15.3		
11	22.8	+ 35 47		15.4		compact
11	22.8	+ 38 19		14.7		
11	22.9	+ 32 36		15.7		
11	23.6	+ 35 37		15.4		double system
11	23.7	+ 35 36		15.6		
11	23.9	+ 35 42		15.3		
11	24.1	+ 35 31		14.9		
11	24.2	+ 33 23		15.6		
11	24.8	+ 36 19		15.0		
11	24.8	+ 36 20		15.7		
11	26.2	+ 35 41	3694	13.5		
11	26.6	+ 35 51	3695	14.9		
11	26.7	+ 35 08		15.6		extremely diffuse spiral
11	26.9	+ 35 47	3700	15.1		
11	27.7	+ 37 00		15.2		
11	28.0	+ 35 47		15.6		
11	28.4	+ 35 52		15.6		
11	28.5	+ 34 29		15.6		diffuse spiral
11	28.6	+ 32 58		15.4		compact
11	29.0	+ 34 36		15.3		
11	29.3	+ 36 58		14.0		
11	29.9	+ 35 36		14.1		
11	30.6	+ 34 32	2925*	15.6		
11	30.7	+ 32 52		15.4		
11	30.7	+ 34 20		15.7		
11	30.8	+ 33 46		15.4		
11	30.8	+ 34 22		15.7		
11	30.8	+ 34 35	2928*	14.7		
11	31.0	+ 32 54		14.5		
11	31.5	+ 34 35	2933*	15.2		
11	31.7	+ 38 14		15.7		





FIELD No. 186

$11^{\text{h}}45^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 109

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
15857	11	31	17.1	+ 37 05 33	6.33
16035	11	38	25.3	+ 34 29 03	5.46
16199	11	47	06.1	+ 35 12 34	5.76
16253	11	50	06.2	+ 38 04 39	6.46
16392	11	56	43.4	+ 33 26 44	6.02
16439	11	59	06.2	+ 36 19 17	5.62

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1129.7 + 3545	compact	113	1.7	VD	13
1129.9 + 3643	compact	82	0.7	ED	11
1130.1 + 3703	medium compact	150	1.1	ED	10
1130.2 + 3323	open	97	2.0	VD	17
1130.6 + 3514	open	122	3.3	MD	14
1130.9 + 3435	open	166	4.2	Near	15
1130.9 + 3810	medium compact	142	2.7	D	7
1131.8 + 3404	open	150	2.8	D	16
1132.0 + 3753	compact	53	0.6	ED	8
1132.3 + 3739	compact	200	2.3	D	9
1132.4 + 3615	medium compact	240	3.8	D	12
1133.1 + 3816	open	121	1.5	ED	6
1134.8 + 3310	medium compact	576	6.6	MD	2
1135.3 + 3742	medium compact	131	2.1	D	49
1137.0 + 3601	medium compact	71	1.1	VD	50
1140.0 + 3348	medium compact	55	1.5	VD	40
1141.6 + 3602	medium compact	98	1.8	ED	36
1142.2 + 3456	medium compact	470	19.4	Near	37
1142.5 + 3343	medium compact	154	2.6	D	48
1144.1 + 3745	open	229	5.4	MD	31
1144.7 + 3348	compact	87	1.0	VD	47
1144.7 + 3620	medium compact	130	1.2	ED	35
1145.7 + 3821	medium compact	81	1.8	VD	32
1146.1 + 3728	compact	89	1.4	VD	33
1146.9 + 3704	medium compact	92	1.2	ED	34
1148.2 + 3225	open	253	4.9	MD	3
1148.5 + 3352	compact	112	2.2	VD	46
1148.7 + 3655	medium compact	98	1.6	VD	28
1149.4 + 3538	medium compact	117	1.4	ED	30
1149.6 + 3742	compact	578	5.1	D	25
1150.0 + 3438	open	104	1.4	ED	1
1150.1 + 3603	compact	102	1.1	ED	29
1150.9 + 3609	open	208	5.4	MD	27
1153.0 + 3321	medium compact	235	5.1	MD	5
1153.4 + 3459	medium compact	70	1.3	VD	41
1153.5 + 3449	compact	67	0.6	ED	42
1154.2 + 3625	medium compact	92	0.9	VD	23
1154.2 + 3646	medium compact	133	1.8	D	24
1154.9 + 3400	medium compact	128	2.7	MD	45
1155.0 + 3127	medium compact	209	8.6	Near	4
1155.3 + 3721	open	170	5.1	MD	22
1155.8 + 3441	medium compact	202	3.4	D	44
1155.8 + 3823	medium compact	76	0.8	ED	21
1156.0 + 3603	medium compact	127	1.8	D	20
1157.9 + 3620	open	102	1.8	D	19
1158.3 + 3551	medium compact	198	3.6	MD	18
1158.7 + 3435	compact	120	1.5	VD	38
1158.8 + 3315	open	222	5.4	MD	43
1200.1 + 3410	medium compact	162	2.9	VD	39
1201.3 + 3530	medium compact	240	3.5	VD	26

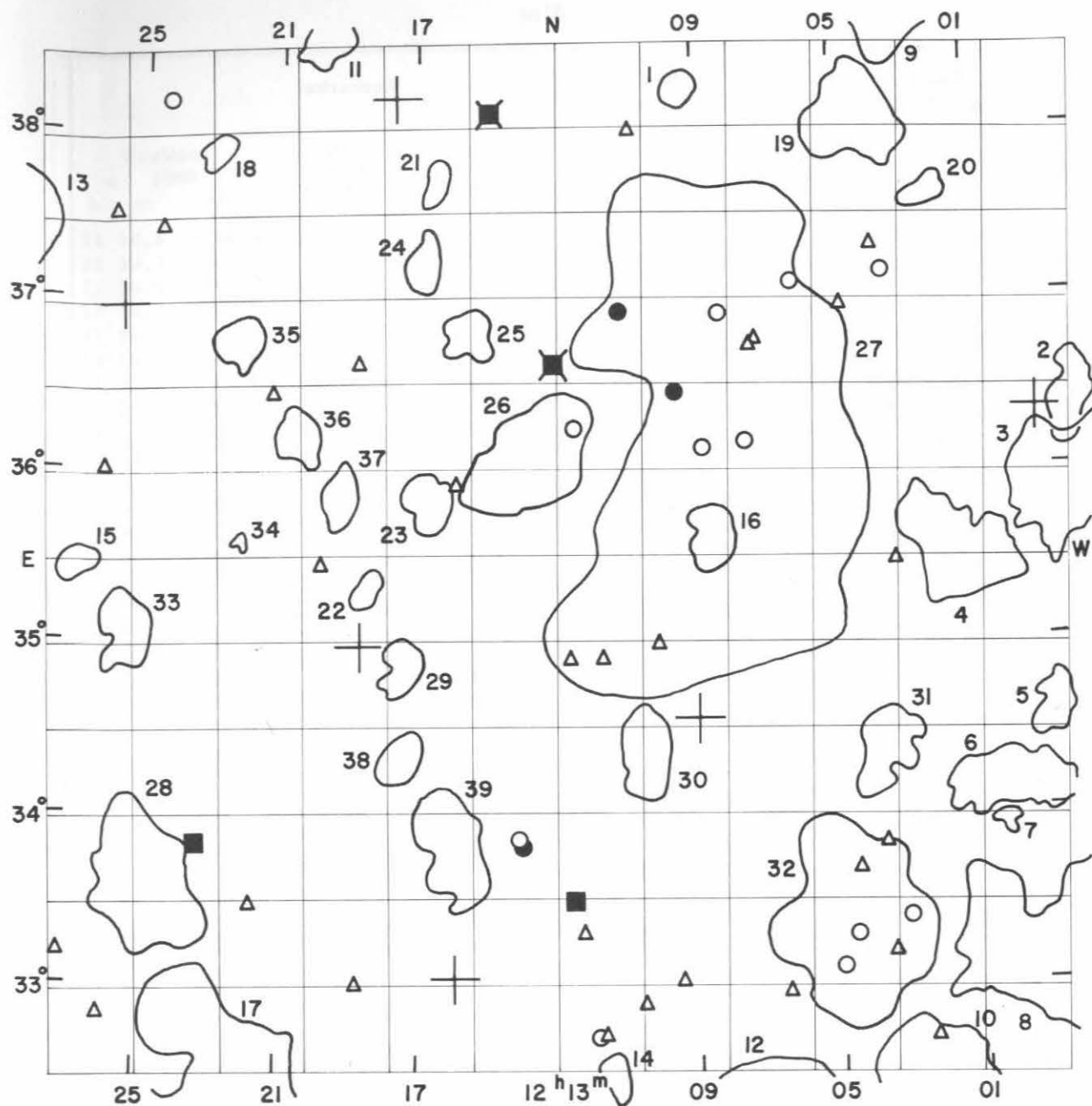
Average number of galaxies per cluster = 160.5

GALAXIES						
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
a	1950	δ				
h	m	o				
11	30.6	+34 32	2925*	15.6		
11	30.7	+34 20		15.7		
11	30.8	+33 46		15.4		
11	30.8	+34 22		15.7		
11	30.8	+34 35	2928*	14.7		
11	31.0	+32 54		14.5		
11	31.5	+34 35	2933*	15.2		
11	31.7	+38 14		15.7		
11	31.8	+33 27		15.0		compact
11	32.8	+33 34		15.6		
11	33.2	+35 36		14.5		
11	33.9	+36 40	3755	13.9		
11	34.9	+32 31	2946*	15.2		
11	35.4	+35 28		15.0		
11	35.9	+34 08		15.1		
11	36.0	+36 02		15.4		
11	36.1	+34 04		15.3		
11	36.6	+34 12		15.4		
11	37.8	+32 47		15.7		
11	37.9	+36 24		15.4		
11	37.9	+36 57		15.5		
11	38.2	+33 57		15.2		
11	38.2	+35 28		14.9		
11	38.7	+36 49	3813	12.6		m <sub>H</sub> = 12.6 Sc
11	38.9	+32 37		15.6		
11	39.0	+38 15	2950*	14.8		
11	40.8	+36 23		15.5		eccentric nucleus + jet
11	41.0	+33 41		15.7		
11	41.4	+33 48		15.7		double system
11	41.5	+37 27		14.9		extremely faint jets
11	41.6	+33 37	2952*	15.6		
11	41.6	+33 47	3847	14.6		
11	41.7	+33 37	2953*	15.1		
11	41.8	+32 56		15.3		
11	42.0	+36 14		15.1		
11	42.1	+33 35	3855=3856	15.6		
11	42.6	+33 36	729*	15.5		
11	42.7	+32 59		15.4		
11	42.9	+34 50		15.7		
11	43.2	+33 15		15.6		
11	43.5	+33 23	3871	15.4		
11	43.6	+33 28	3878	15.5		very compact
11	43.7	+33 26	3880	14.8		compact
11	43.7	+35 16	2960*	15.6		
11	43.8	+35 07		15.0		
11	43.9	+33 23	3881	15.2		compact
11	44.1	+35 16		15.5		
11	44.7	+35 18		15.7		very compact
11	45.0	+35 50		15.6		compact
11	45.1	+36 43		15.7		
11	45.4	+37 43		15.4		triple system, connected
11	46.0	+32 55		15.5		compact
11	46.1	+36 03		15.7		system with jet
11	46.4	+35 18	3897	14.2		
11	48.1	+32 58		15.6		very compact
11	48.8	+35 29		15.3		

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
11 48.8		+ 35 43		14.3		
11 49.0		+ 36 52		15.7		
11 49.1		+ 38 16	3930	13.5		
11 49.2		+ 36 52		15.6		
11 49.8		+ 32 41	3935	14.0		
11 50.3		+ 37 15	3941	11.3	+ 950	$m_H = 11.4$ Sa
11 50.5		+ 35 18		14.7		
11 51.1		+ 35 26		15.5		
11 51.2		+ 37 26		15.6		
11 51.2		+ 33 38	2973*	14.5		
11 52.7		+ 33 25		15.6		
11 52.8		+ 33 24		15.3		
11 52.9		+ 37 40		15.4		
11 53.4		+ 37 26		15.7		
11 54.1		+ 32 53		15.5		
11 54.7		+ 36 41		15.3		
11 54.9		+ 32 36	3991	13.8		double system, bridge
11 55.0		+ 32 33	3994	13.7		
11 55.2		+ 32 34	3995	12.9	+ 3347	$m_H = 12.9$ S
11 55.3		+ 36 40		15.1		double system, bridge
11 55.7		+ 36 54		15.6		very compact
11 55.8		+ 38 20		15.2		extremely diffuse
11 56.6		+ 34 51		15.5		
11 56.6		+ 38 03	4025	14.9		
11 56.9		+ 35 10		15.5		
11 57.3		+ 35 11		15.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956	Holmberg 1958	
3941	-	-	-	-	11.3 SB0	-	-
3995	-	-	-	-	- Sc	-	-



FIELD No. 187

$12^{\text{h}}13^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 1599

#### GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s	° ' "	
16439	11	59	06.2	+ 36 19 17	5.62
16650	12	09	00.2	+ 34 32 16	7.12
16788	12	15	58.6	+ 33 01 36	6.68
16825	12	17	44.3	+ 38 10 47	6.67
16851	12	18	41.4	+ 34 57 52	7.17
17000	12	25	41.2	+ 36 57 38	9.2



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1157.9 + 3620	open	102	1.8	D	2
1158.3 + 3551	medium compact	198	3.6	MD	3
1158.7 + 3435	compact	120	1.5	VD	5
1158.8 + 3315	open	222	5.4	MD	8
1200.1 + 3355	compact	58	0.6	ED	7
1200.1 + 3410	medium compact	162	2.9	VD	6
1201.3 + 3530	medium compact	240	3.5	VD	4
1201.5 + 3916	medium compact	210	8.9	Near	9
1202.1 + 3735	medium compact	58	1.1	ED	20
1202.7 + 3225	medium compact	161	3.8	D	10
1203.6 + 3420	medium compact	77	2.2	VD	31
1204.3 + 3802	medium compact	131	3.1	D	19
1204.7 + 3319	open	123	5.5	Near	32
1208.1 + 3603	open	180	12.2	Near	27
1208.5 + 3536	medium compact	113	1.7	MD	16
1209.4 + 3813	medium compact	58	1.0	ED	1
1210.5 + 3420	compact	139	2.2	VD	30
1211.4 + 3228	medium compact	65	1.2	ED	14
1213.7 + 3604	open	111	3.6	D	26
1215.6 + 3646	compact	76	1.6	ED	25
1216.0 + 3347	open	103	2.9	D	39
1216.5 + 3740	compact	70	1.1	ED	21
1216.6 + 3548	medium compact	100	1.7	VD	23
1216.9 + 3711	medium compact	75	1.3	ED	24
1217.5 + 2915	medium compact	1828	30.9	Near	12
1217.5 + 3419	medium compact	58	1.5	VD	38
1217.5 + 3450	compact	98	1.5	ED	29
1218.5 + 3518	compact	71	1.0	ED	22
1219.3 + 3550	medium compact	98	1.5	ED	37
1219.7 + 3833	medium compact	67	1.6	VD	11
1220.5 + 3610	compact	71	1.6	ED	36
1222.1 + 3534	compact	37	0.3	ED	34
1222.2 + 3644	medium compact	62	1.6	ED	35
1223.0 + 3752	medium compact	55	1.0	VD	18
1224.6 + 3131	medium compact	521	11.9	Near	17
1224.6 + 3334	medium compact	112	3.8	D	28
1225.3 + 3503	medium compact	93	2.0	VD	33
1226.8 + 3525	compact	67	1.1	ED	15
1231.9 + 3732	medium compact	180	7.4	D	13

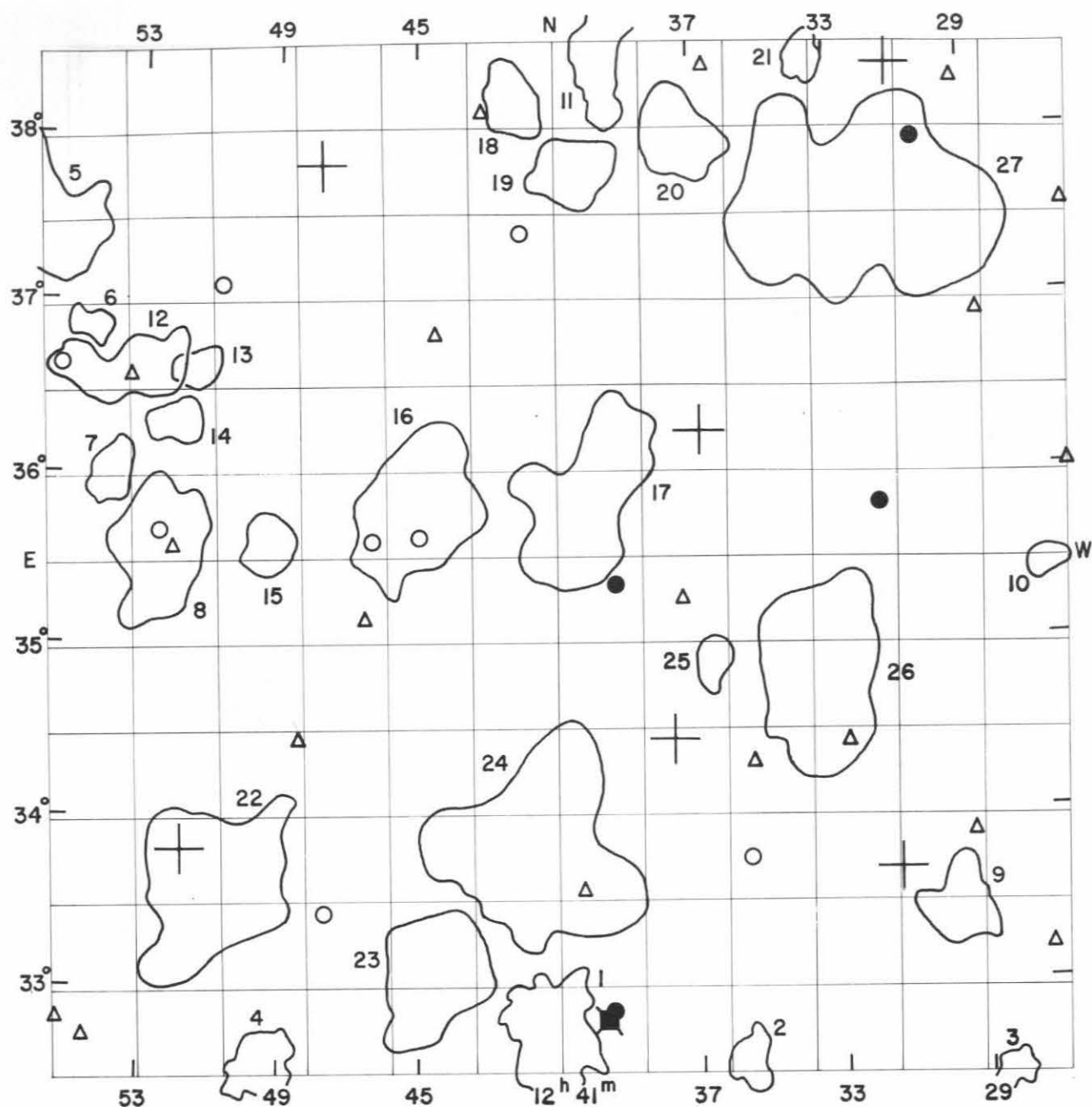
Average number of galaxies per cluster = 163.3

## GALAXIES

Position a 1950 $\delta$ h m o	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
12 02.4 + 32 40		15.7		
12 03.1 + 33 23		14.9		
12 03.3 + 35 27		15.7		compact
12 03.5 + 37 08	4097	14.6		
12 03.6 + 33 10	2993*	15.5		double system
12 03.7 + 33 48	3001*	15.7		
12 03.8 + 37 17		15.6		
12 04.5 + 33 39		15.6		very diffuse
12 04.6 + 33 16	4122	14.8		







FIELD No. 188

$12^{\text{h}}41^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 105

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
17116	12	31	03.8	+	38	20 41	6.72
17125	12	31	19.9	+	33	39 37	6.37
17231	12	36	51.1	+	36	13 35	6.32
17244	12	37	42.8	+	34	26 24	7.52
17430	12	47	48.3	+	37	47 19	5.86
17517	12	51	49.9	+	33	48 17	6.26

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1226.8 + 3525	compact	67	1.1	ED	10
1228.4 + 3228	compact	141	1.1	ED	3
1229.7 + 3325	medium compact	65	2.4	VD	9
1231.9 + 3732	medium compact	180	7.4	D	27
1233.4 + 3448	medium compact	122	5.0	D	26
1233.6 + 3825	compact	70	1.4	ED	21
1235.8 + 3234	medium compact	153	1.6	VD	2
1236.5 + 3453	compact	76	1.3	ED	25
1237.3 + 3758	compact	79	2.7	VD	20
1239.6 + 3832	medium compact	218	2.9	VD	11
1240.2 + 3549	medium compact	144	4.6	ED	17
1240.5 + 3745	medium compact	75	2.3	VD	19
1241.3 + 3244	open	100	3.3	D	1
1241.6 + 3345	medium compact	171	6.2	MD	24
1242.2 + 3810	medium compact	80	2.0	VD	18
1244.5 + 3303	medium compact	103	3.8	D	23
1245.0 + 3546	compact	192	4.4	VD	16
1249.3 + 3534	medium compact	71	1.8	ED	15
1249.5 + 3232	open	148	2.2	VD	4
1250.7 + 3335	open	98	4.9	D	22
1251.5 + 3636	compact	95	1.3	ED	13
1252.0 + 3617	medium compact	94	1.5	D	14
1252.5 + 3533	medium compact	146	3.6	VD	8
1253.5 + 3635	medium compact	86	2.9	D	12
1254.0 + 3600	compact	106	1.7	ED	7
1254.6 + 3651	compact	59	1.2	ED	6
1255.9 + 3729	medium compact	107	3.8	D	5

Average number of galaxies per cluster = 112.8

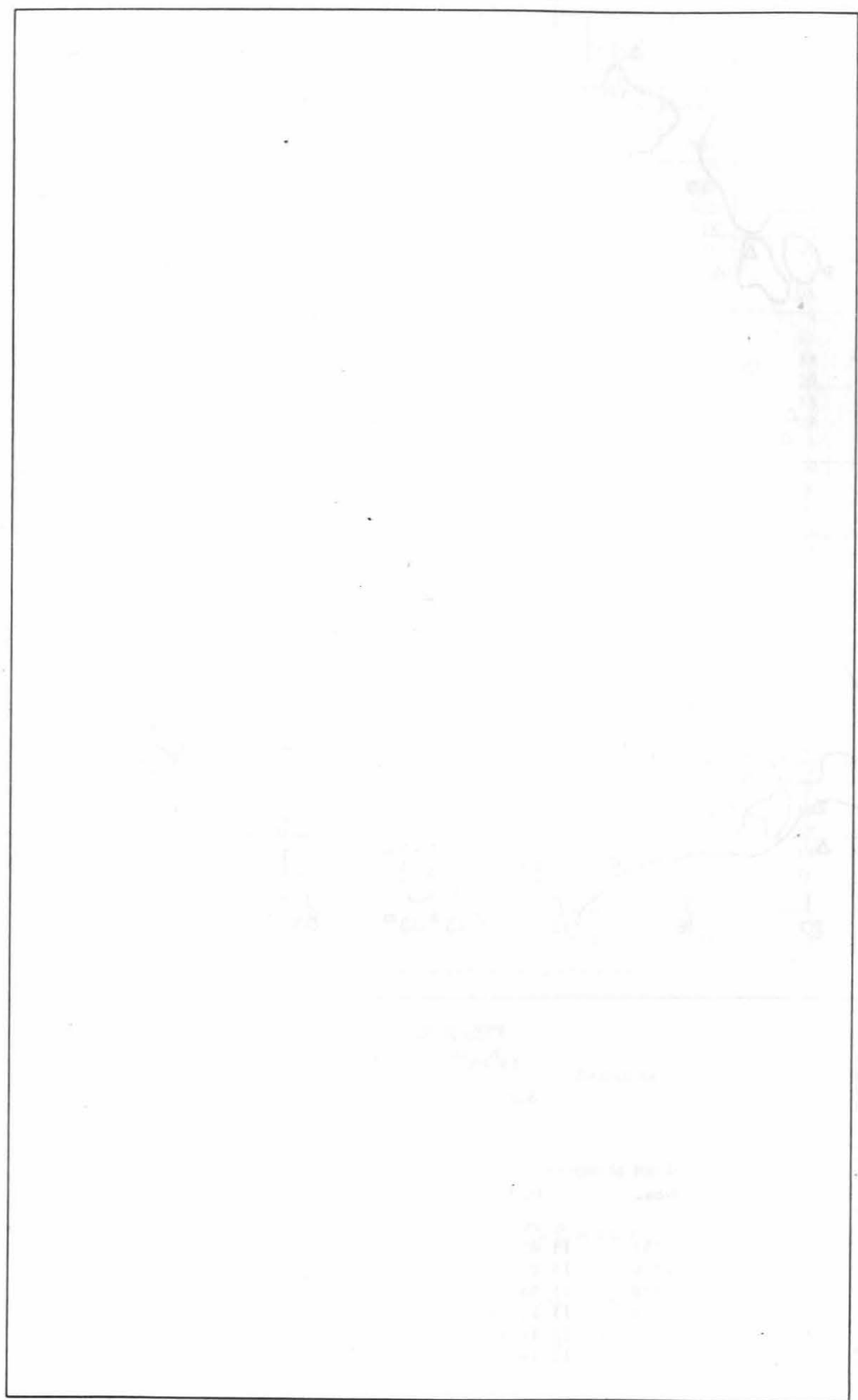
## GALAXIES

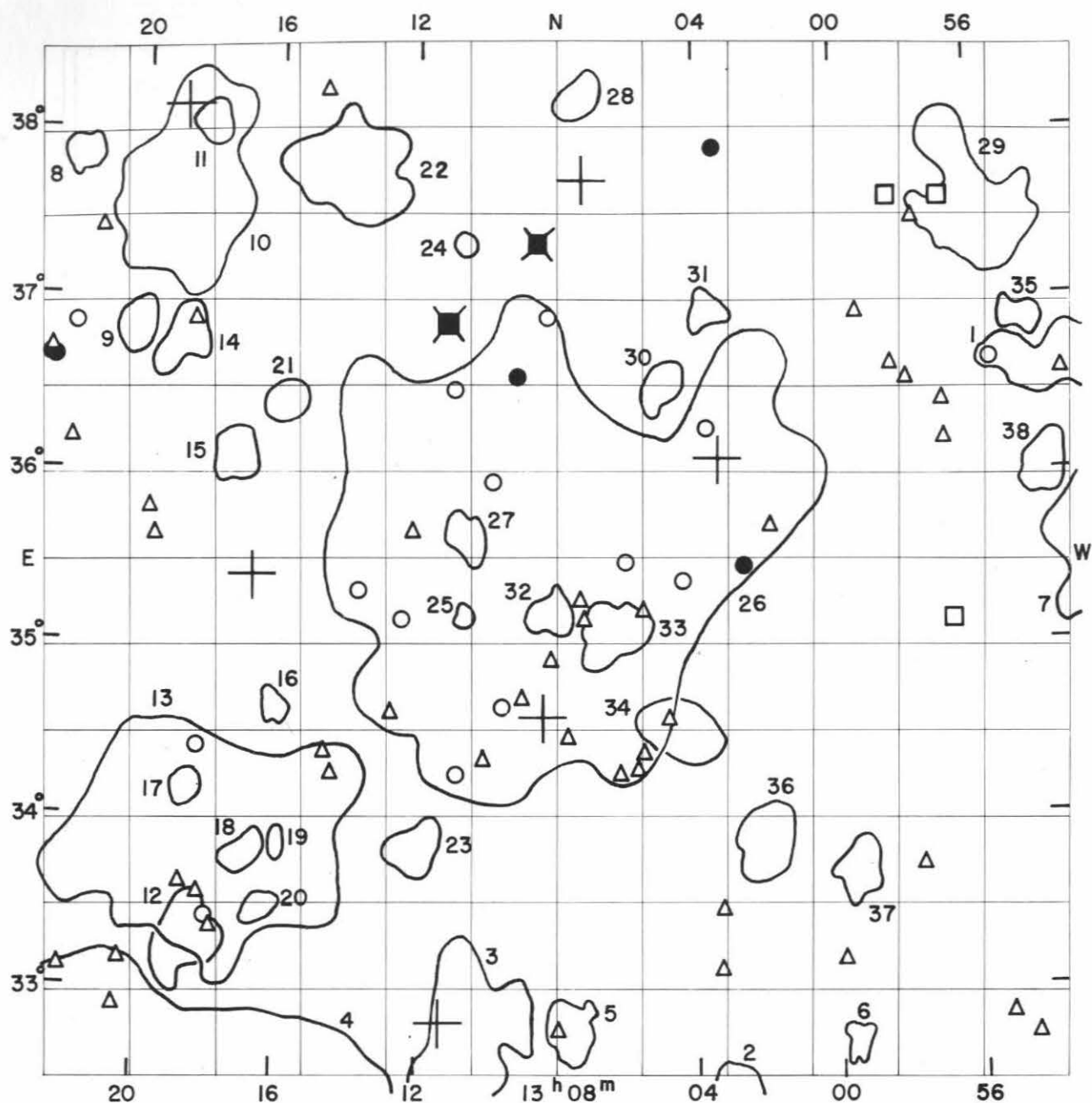
Position α 1950 δ	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h m o				
12 26.0 + 37 30		15.6		diffuse spiral
12 26.2 + 36 00		15.3		diffuse
12 27.1 + 33 11		15.7		
12 28.7 + 36 53		15.3		
12 29.1 + 38 15		15.2		
12 29.2 + 33 52		15.6		
12 30.4 + 37 54		13.4		
12 31.6 + 35 48	4534	13.2		
12 32.7 + 34 24		15.2		
12 35.5 + 34 17		15.5		
12 35.6 + 33 44	4583	14.7		
12 36.5 + 38 22		15.4		faint streamers around it
12 37.4 + 35 15		15.5		compact
12 39.3 + 35 20	4619	13.5		
12 39.5 + 32 51	4627	13.3		
12 39.7 + 32 49	4631	9.8	+ 591	m <sub>H</sub> = 9.6 Sc
12 40.3 + 33 33		15.7		
12 42.1 + 37 23	4662	14.1		
12 43.2 + 38 05	3746*	15.6		
12 44.6 + 36 47	3772*	15.7		
12 45.0 + 35 37	4687	14.3		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	'				
12	46.4	+ 35	36	3804*	14.4		
12	46.6	+ 35	08		15.7		
12	47.7	+ 33	25	4719	14.2		
12	48.5	+ 34	25	4737	15.3		
12	50.8	+ 37	05	4774	14.6		double system, faint bridge
12	52.2	+ 35	33		15.6		diffuse
12	52.6	+ 35	39		14.8		
12	53.4	+ 36	33	3904*	15.7		
12	54.6	+ 32	43		15.1		eccentric nucleus, jet
12	55.3	+ 32	49		15.6		
12	55.5	+ 36	38	4846	14.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4627	-	-	-	-	-	-	13.01	S
4631	9.4	Sc	9.91	Sc	9.6	Sc	9.71	Sc+





FIELD No. 189

$13^{\text{h}}08^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 110

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
17751	13	03	24.3	+	36	03 57	5.11
17826	13	07	20.5	+	37	41 20	6.14
17848	13	08	26.2	+	34	33 59	6.84
17914	13	11	24.3	+	32	47 43	6.75
18023	13	16	46.4	+	35	23 24	5.96
18069	13	18	54.9	+	38	07 07	6.86



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1252.5 + 3533	medium compact	146	3.6	VD	7
1253.5 + 3635	medium compact	86	2.9	D	1
1254.0 + 3600	compact	106	1.7	ED	38
1254.6 + 3651	compact	59	1.2	ED	35
1255.9 + 3729	medium compact	107	3.8	D	29
1259.5 + 3341	compact	74	1.7	ED	37
1259.6 + 3241	medium compact	72	0.9	ED	6
1302.1 + 3350	compact	147	2.1	VD	36
1303.3 + 3206	compact	297	3.8	D	2
1303.8 + 3656	medium compact	96	1.2	ED	31
1304.4 + 3430	medium compact	139	2.3	ED	34
1305.0 + 3630	compact	79	1.3	ED	30
1306.4 + 3503	medium compact	94	2.0	VD	33
1307.5 + 3810	medium compact	90	1.4	VD	28
1307.6 + 3245	compact	86	1.7	ED	5
1308.2 + 3510	compact	88	1.4	ED	32
1308.2 + 3531	open	210	14.3	Near	26
1310.6 + 3536	compact	83	1.4	ED	27
1310.7 + 3510	compact	46	0.6	ED	25
1310.7 + 3719	compact	51	0.7	ED	24
1310.8 + 3230	medium compact	211	4.9	D	3
1312.1 + 3349	medium compact	113	1.7	ED	23
1314.0 + 3745	medium compact	122	3.6	MD	22
1315.9 + 3623	medium compact	108	1.3	ED	21
1316.0 + 3351	compact	57	0.7	ED	19
1316.1 + 3438	compact	70	0.9	ED	16
1316.4 + 3328	compact	54	0.9	ED	20
1317.0 + 3347	compact	80	1.1	ED	18
1317.3 + 3605	medium compact	78	1.5	ED	15
1317.9 + 3350	compact	147	8.4	Near	13
1318.2 + 3801	medium compact	61	1.3	ED	11
1318.5 + 3316	medium compact	163	2.3	ED	12
1318.6 + 3410	medium compact	81	1.0	VD	17
1318.9 + 3645	compact	116	1.8	ED	14
1319.0 + 3736	medium compact	105	5.3	MD	10
1319.6 + 3135	open	411	16.2	Near	4
1320.3 + 3649	compact	73	1.5	ED	9
1322.0 + 3750	compact	69	1.2	VD	8

Average number of galaxies per cluster = 112.5

## GALAXIES

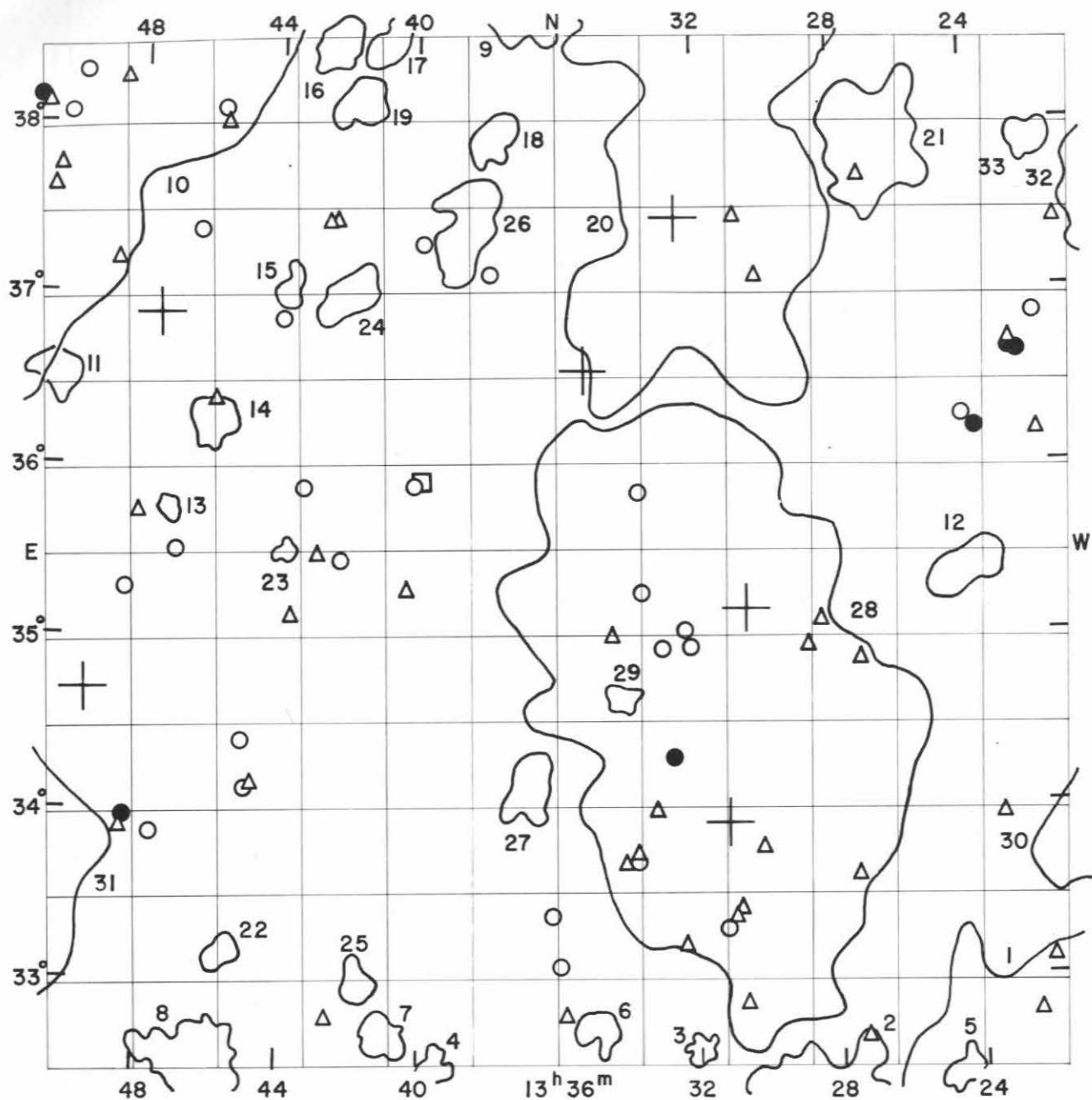
Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
12	53.4	+ 36 33	3904*	15.7		
12	54.6	+ 32 43		15.1		eccentric nucleus, jet
12	55.3	+ 32 49		15.6		
12	55.5	+ 36 38	4846	14.6		
12	56.7	+ 35 08	4861+3961*	12.8	+ 793	$m_H = 12.7$ S *)
12	56.8	+ 36 11		15.4		
12	56.8	+ 36 23	3967*	15.7		
12	56.8	+ 37 34	4868	12.9		$m_H = 13.1$
12	57.7	+ 33 42		15.2		
12	57.7	+ 37 27	4893	15.6		= 4015*+4016*, double system
12	57.9	+ 36 31	4028*	15.5		
12	58.4	+ 36 37	4049*	15.3		

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	s				
12	58.4	+37 35	4914	12.7		$m_H = 13.0$
12	59.4	+36 54	4086*	15.7		
13	00.0	+33 09		15.5		
13	01.9	+35 41		15.7		compact
13	02.7	+35 27	4956	13.5		
13	03.3	+33 27	4959	15.4		compact
13	03.4	+33 06		15.5		
13	03.5	+37 52	4182*	14.0		
13	03.7	+36 14	4189*	14.5		
13	04.4	+35 22		14.7		
13	04.8	+34 34		15.7		
13	05.5	+34 21		15.5		
13	05.5	+35 11		15.3		
13	05.7	+34 16		15.6		very compact
13	06.0	+35 28	4986	14.2		
13	06.3	+34 15		15.7		
13	07.3	+35 08		15.7		
13	07.4	+35 15		15.6		
13	07.7	+34 27		15.1		
13	08.0	+32 45		15.6		
13	08.2	+34 54		15.7		
13	08.3	+36 53	5002	14.7		
13	08.6	+37 19	5005	10.6	+1027	$m_H = 11.3$ Sc
13	09.0	+34 41		15.5		
13	09.2	+36 32	5014	13.5		
13	09.6	+34 38		14.8		
13	09.8	+35 56	4213*	14.1		
13	10.1	+34 20		15.7		
13	10.8	+34 15		15.0		
13	11.0	+36 28		14.7		
13	11.2	+36 51	5033	10.9	+916	$m_H = 11.6$ Sc
13	12.1	+35 38		15.4		
13	12.5	+35 08		14.9		
13	12.8	+34 35	861*	15.6		
13	13.8	+35 18		14.6		
13	14.5	+34 15		15.7		compact
13	14.7	+34 22		15.4		
13	14.8	+38 12		15.7		
13	17.8	+33 21	5096	15.1		triple system, connected
13	18.0	+33 24	5098	15.0		double system in halo
13	18.3	+33 33		15.4		
13	18.3	+34 25	883*	14.8		system with two jets
13	18.6	+36 52		15.6		
13	18.7	+33 36		15.5		
13	19.6	+35 37		15.5		
13	19.7	+35 46		15.4		
13	20.4	+33 08		15.7		
13	20.5	+32 53		15.6		
13	21.4	+37 24		15.6		
13	22.1	+33 06		15.6		
13	22.1	+36 10		15.3		
13	22.1	+36 51		14.6		
13	22.6	+36 38	5141	13.9		
13	22.8	+36 40	5142	14.0		
13	22.8	+36 42	5143	15.5		

\*) IC 3961\* is a spiral galaxy of magnitude 14.1, seen edgewise. NGC 4861 is a bright emission patch of magnitude 13.2 at the SW end of the galaxy. The integrated magnitude is therefore  $m_p = 12.8$ .

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4861	-	-	13.10	Irr.	12.9	Irr.	-	-
5005	-	-	10.71	Sb	10.6	Sb	10.52	Sb+
5033	11.4	-	10.78	Sc	10.6	Sc	10.61	Sc-



FIELD No. 190

$13^{\text{h}}36^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 116

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
18319	13	30	35.6	+	35	09 49	6.80
18330	13	31	06.5	+	33	54 50	6.80
18359	13	32	34.0	+	37	26 17	4.96
18421	13	35	14.4	+	36	32 55	4.92
18691	13	47	34.3	+	36	52 48	6.35
18741	13	49	35.2	+	34	41 28	4.96

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1317.9 + 3350	compact	147	8.4	Near	30
1319.0 + 3736	medium compact	105	5.3	MD	32
1319.6 + 3135	open	411	16.2	Near	1
1322.0 + 3750	compact	69	1.2	VD	33
1324.1 + 3520	medium compact	131	1.8	ED	12
1324.5 + 3225	medium compact	120	1.2	ED	5
1326.6 + 3750	medium compact	117	3.6	Near	21
1328.5 + 3205	medium compact	419	5.0	VD	2
1331.5 + 3432	medium compact	355	14.4	MD	28
1331.7 + 3805	open	365	12.4	MD	20
1331.9 + 3234	medium compact	94	0.8	ED	3
1334.1 + 3438	compact	63	0.9	ED	29
1334.8 + 3241	compact	56	1.3	ED	6
1336.8 + 3407	medium compact	100	1.8	VD	27
1337.0 + 3840	medium compact	266	2.2	ED	9
1337.8 + 3753	medium compact	78	1.4	MD	18
1338.6 + 3722	medium compact	171	2.4	VD	26
1339.4 + 3229	compact	77	1.0	ED	4
1340.9 + 3238	open	63	1.3	ED	7
1340.9 + 3827	medium compact	117	1.4	ED	17
1341.7 + 3257	compact	92	1.1	ED	25
1341.7 + 3805	medium compact	81	1.4	ED	19
1342.1 + 3658	medium compact	120	1.7	VD	24
1342.4 + 3826	compact	176	1.6	VD	16
1343.7 + 3700	compact	82	1.0	ED	15
1343.8 + 3528	compact	47	0.6	ED	23
1345.5 + 3309	medium compact	57	1.0	ED	22
1345.9 + 3614	medium compact	83	1.5	ED	14
1346.1 + 3230	medium compact	162	2.8	D	8
1347.1 + 3544	compact	60	0.7	ED	13
1350.6 + 3630	medium compact	82	1.5	D	11
1351.3 + 3333	medium compact	129	6.2	Near	31
1352.9 + 3856	medium compact	310	22.1	Near	10

Average number of galaxies per cluster = 145.6

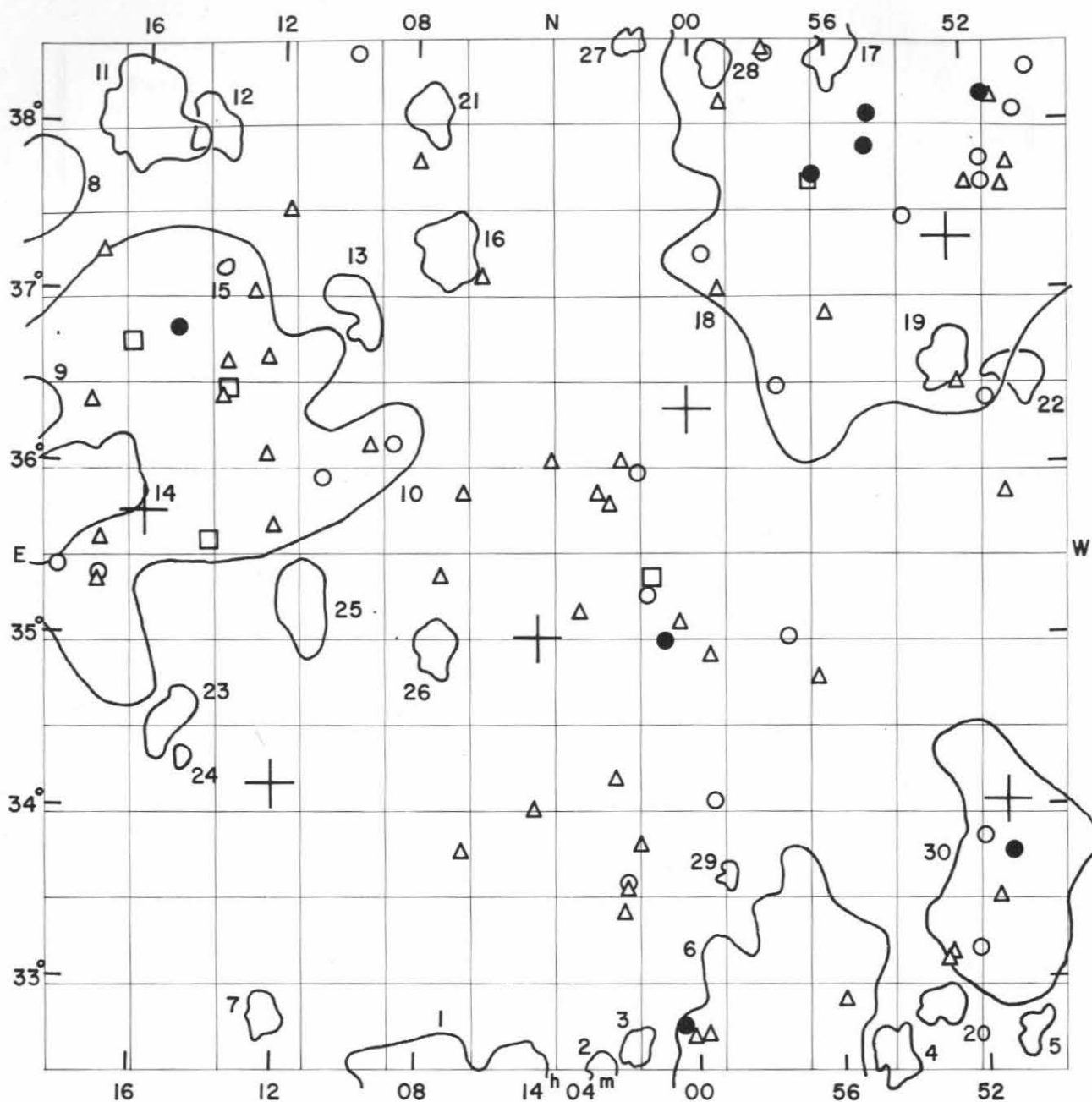
## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	°				
13	21.4	+37	24		15.6		
13	22.1	+33	06		15.6		
13	22.1	+36	10		15.3		
13	22.1	+36	51		14.6		
13	22.5	+32	48		15.3		
13	22.6	+36	38	5141	13.9		
13	22.8	+36	40	5142	14.0		
13	22.8	+36	42	5143	15.5		
13	23.4	+33	56		15.3		
13	23.9	+36	12	5149	13.8		
13	24.2	+36	16	5154	14.9		
13	27.1	+37	40	4271*	15.6		double nebula
13	27.3	+32	40		15.1		
13	27.4	+34	52		15.5		
13	27.5	+33	36		15.4		double system

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m s	1950	$\delta$ ° ' "					
13 28.4		+ 35 05		5199	15.1		compact
13 28.8		+ 34 56			15.7		
13 30.2		+ 33 46			15.7		compact
13 30.3		+ 37 06			15.7		
13 30.7		+ 32 52			15.5		very compact
13 30.8		+ 37 27			15.6		double system, twisted arms
13 30.9		+ 33 25			15.5		
13 31.0		+ 33 22			15.6		
13 31.2		+ 33 18			14.4		
13 32.1		+ 34 57		5223	14.4		
13 32.3		+ 35 02		5228	14.5		
13 32.4		+ 33 13			15.4		extremely compact
13 32.6		+ 34 18			13.8		
13 32.9		+ 34 56		5233	14.8		
13 33.2		+ 33 58			15.7		compact
13 33.5		+ 35 15			14.6		
13 33.7		+ 33 41		4304*	15.0		
13 33.7		+ 33 44		4305*	15.1		
13 33.7		+ 35 50		5240	14.1		
13 34.0		+ 33 40		4306*	15.7		
13 34.4		+ 35 00			15.4		
13 35.8		+ 32 48			15.7		
13 35.9		+ 33 05			15.0		
13 36.1		+ 33 23			14.3		
13 37.9		+ 37 07		5265	14.9		
13 39.8		+ 35 54		5273	12.7	+1022	$m_H = 12.9$ E
13 39.8		+ 37 17			14.6		
13 40.1		+ 35 53		5276	14.6		
13 40.3		+ 35 16			15.2		
13 42.2		+ 35 26			14.5		
13 42.4		+ 37 25			15.6		
13 42.6		+ 32 47			15.2		
13 42.6		+ 37 25			15.2		
13 42.9		+ 35 27			15.2		
13 43.4		+ 35 52			15.0		
13 43.6		+ 35 07			15.6		
13 44.0		+ 36 50			15.0		
13 44.8		+ 34 09			15.5		
13 44.9		+ 34 08			14.8		
13 45.1		+ 34 24			14.5		
13 45.6		+ 37 59			15.4		
13 45.7		+ 38 04		5305	14.7		
13 45.9		+ 36 22			15.7		
13 46.4		+ 37 21			14.9		
13 47.0		+ 35 30			14.7		
13 47.6		+ 33 52		5312	14.8		
13 48.1		+ 35 43			15.3		
13 48.3		+ 33 57		5318	13.5		double system, faint bridge
13 48.4		+ 35 17			14.8		
13 48.5		+ 33 53		5321	15.3		
13 48.6		+ 38 15			15.4		diffuse spiral
13 48.8		+ 37 12			15.1		
13 49.9		+ 38 19			14.8		
13 50.4		+ 38 04		5341	14.1		
13 50.6		+ 37 45			15.5		
13 50.8		+ 37 37			15.7		
13 51.0		+ 38 08		5349	15.1		
13 51.3		+ 38 10		5351	13.1		$m_H = 13.0$

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5273	-	-	-	-	12.5	S0	-	-



FIELD No. 191

$14^{\text{h}}04^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 106

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	i	"	
18776	13	51	10.7	+	34	01 56	7.20
18811	13	52	28.9	+	37	18 43	7.48
18967	14	00	11.4	+	36	21 11	7.10
19059	14	04	32.1	+	35	00 58	7.07
19219	14	12	07.8	+	34	09 38	8.6
19296	14	15	53.0	+	35	44 22	4.83



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1350.6 + 3239	medium compact	97	1.0	ED	5
1350.6 + 3630	medium compact	82	1.5	D	22
1351.3 + 3333	medium compact	129	6.2	Near	30
1352.6 + 3636	medium compact	94	1.7	VD	19
1352.9 + 3856	medium compact	310	22.1	Near	18
1353.2 + 3250	medium compact	70	1.3	ED	20
1354.4 + 3234	medium compact	184	1.7	ED	4
1355.9 + 3827	medium compact	71	1.8	VD	17
1357.6 + 3244	open	122	7.4	Near	6
1359.1 + 3337	medium compact	40	0.6	ED	29
1359.4 + 3821	medium compact	56	1.2	ED	28
1401.6 + 3237	compact	91	1.1	ED	3
1401.9 + 3829	compact	47	0.8	ED	27
1402.6 + 3227	compact	84	1.1	ED	2
1407.2 + 3715	medium compact	76	2.1	VD	16
1407.5 + 3216	open	125	5.0	D	1
1407.5 + 3456	medium compact	86	1.5	ED	26
1407.7 + 3803	medium compact	85	1.6	VD	21
1409.8 + 3655	medium compact	117	1.7	ED	13
1411.3 + 3510	medium compact	55	2.3	ED	25
1412.1 + 3248	medium compact	96	1.1	VD	7
1413.7 + 3709	compact	40	0.3	ED	15
1414.1 + 3758	compact	79	1.7	VD	12
1414.6 + 3417	compact	47	0.6	ED	24
1415.0 + 3430	medium compact	54	1.6	VD	23
1416.0 + 3802	medium compact	120	3.2	D	11
1416.2 + 3606	open	161	13.1	Near	10
1418.5 + 3545	medium compact	142	4.2	D	14
1419.2 + 3616	compact	87	1.8	VD	9
1420.0 + 3734	medium compact	156	3.6	VD	8

Average number of galaxies per cluster = 100.1

## GALAXIES

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
13	49.9	+ 38 19		14.8		
13	50.4	+ 38 04	5341	14.1		
13	50.6	+ 37 45		15.5		
13	50.8	+ 37 37		15.7		
13	51.0	+ 35 50		15.6		very compact
13	51.0	+ 38 08	5349	15.1		
13	51.1	+ 33 45	5347	13.3		$m_H = 13.2$
13	51.3	+ 38 10	5351	13.1		$m_H = 13.0$
13	51.4	+ 36 23	5352	14.2		
13	51.4	+ 37 38		15.0		
13	51.4	+ 37 46	4341*	14.9		
13	51.5	+ 33 28		15.3		triple system in halo
13	51.9	+ 33 50		14.4		compact, two plumes
13	51.9	+ 37 38		15.6		
13	52.1	+ 33 11		14.8		
13	52.2	+ 36 28		15.6		
13	52.8	+ 33 09		15.6		
13	53.0	+ 33 07		15.5		

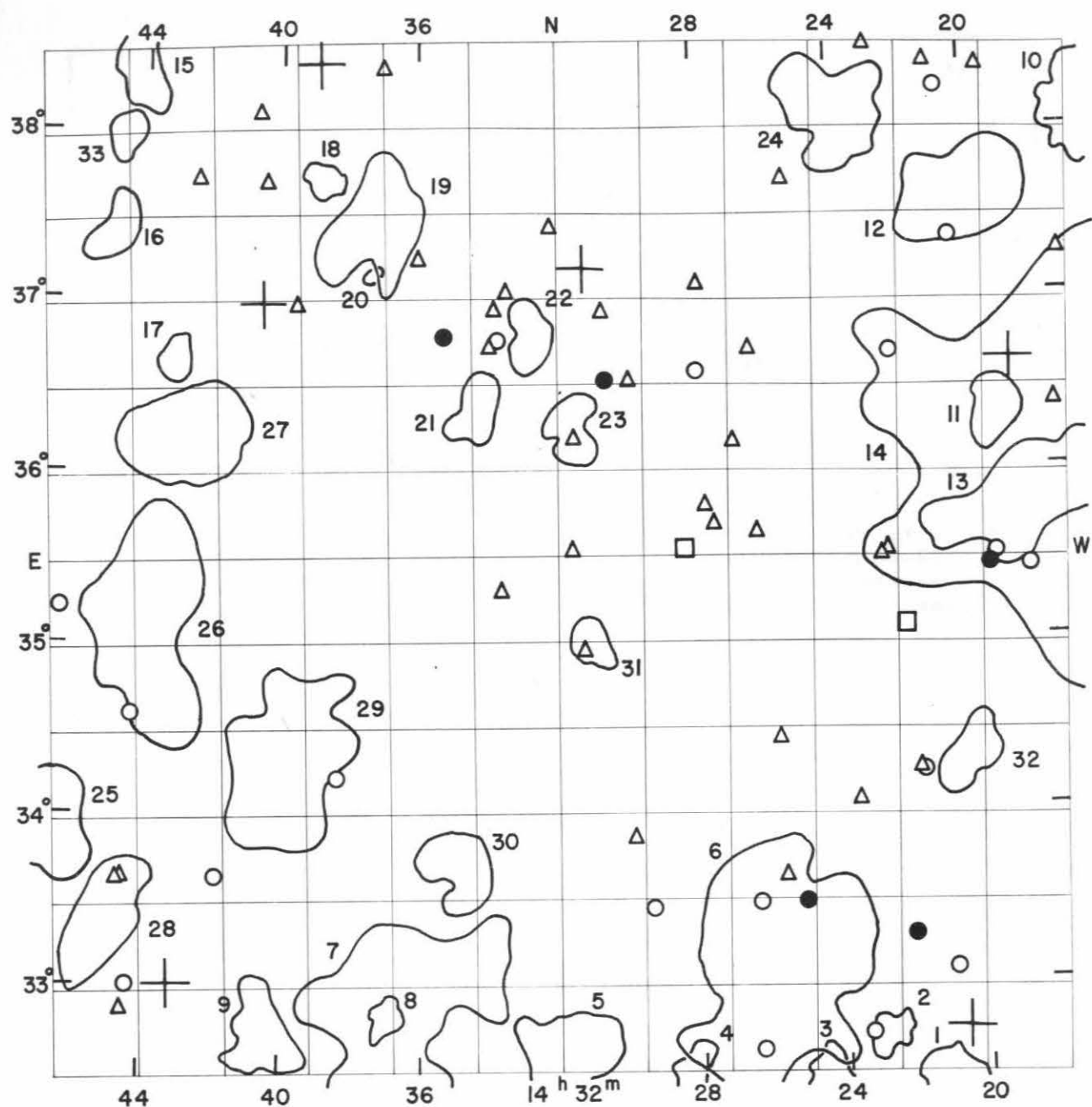
Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o					
13	53.7	+37	26		14.9		
13	54.7	+38	02	5378	13.8		
13	54.8	+37	51	5380	13.5		$m_H = 13.2$
13	55.9	+32	53		15.7		
13	56.1	+36	54		15.7		very diffuse spiral
13	56.4	+37	42	5394	13.7	+3558	
13	56.5	+34	46		15.6		
13	56.5	+37	40	5395	12.6		$m_H = 13.0$
13	57.3	+35	01	5399	14.7		
13	57.5	+36	29	5401	14.6		
13	57.8	+38	25	5403	14.9		
13	57.9	+38	26		15.2		
13	59.1	+38	07		15.5		
13	59.2	+37	02		15.2		
13	59.5	+34	04	5421	14.3		double system
13	59.6	+32	42		15.7		
13	59.6	+34	55		15.3		compact
13	59.7	+37	15		14.6		
14	00.0	+32	41		15.6		
14	00.3	+32	45	5433	14.0		
14	00.4	+35	06		15.5		
14	00.8	+35	00	5440	13.4		
14	01.2	+35	23	5444	12.8		$m_H = 13.1$
14	01.3	+35	16	5445	14.1		
14	01.5	+33	48		15.5		extremely compact
14	01.6	+35	59		14.2		
14	01.9	+33	33	4369*	15.3		
14	01.9	+33	35	4370*+4371*	15.0		double system
14	02.0	+33	25		15.4		
14	02.1	+36	02		15.4		
14	02.2	+34	12		15.7		
14	02.4	+35	47		15.4		
14	02.8	+35	51		15.7		
14	03.3	+35	10		15.7		
14	04.1	+36	01		15.1		
14	04.6	+34	00		15.6		
14	06.1	+37	07		15.5		
14	06.6	+35	51		15.5		
14	06.7	+33	46		15.6		
14	07.2	+35	22		15.7		
14	08.0	+37	47	4380*	15.1		
14	08.7	+36	08	5499	14.5		
14	09.4	+36	07		15.6		compact
14	09.9	+38	25		14.8		
14	10.8	+35	56	5517	15.0		
14	11.7	+37	29		15.3		
14	12.1	+35	39		15.7		
14	12.3	+36	04		15.6		
14	12.3	+36	38	5524	15.3		
14	12.8	+37	00		15.4		
14	13.4	+36	27	5529	12.9	+3781	$m_H = 12.9$ *)
14	13.5	+36	36	5533	15.4		
14	13.6	+36	24		15.7		
14	14.0	+35	34		13.0		
14	15.0	+36	48	5544+5545	13.2		double system, contact
14	16.3	+36	43	5557	12.2	+3195	$m_H = 12.6$ E
14	17.1	+35	22	5567	15.0		compact
14	17.1	+35	33		15.4		compact
14	17.2	+35	19	5568	15.7		

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
14 17.2		+ 37 14		15.7		
14 17.5		+ 36 22	5572	15.2		
14 18.3		+ 35 25	5579	14.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5394	-	-	13.51	Sb	13.6	Sb	-	-
5395	-	-	12.44	Sb	-	-	-	-
5529	-	-	12.82	Sb	12.7	Sb	-	-
5557	-	-	12.33	E1	12.3	E1	-	-

\*)  $V_s$ ,  $m_H$  and all the information from other sources for NGC 5529 were originally published under the designation NGC 5533. This, however, was a clear case of mistaken identity. Position and description of NGC 5529, as given in the NGC, fit the object perfectly.



FIELD No. 192

$14^{\text{h}}32^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 127

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
19353	14	18	45.4	+	36	37 13	7.18
19393	14	20	29.5	+	32	43 51	7.12
19636	14	31	17.6	+	37	10 45	6.44
19784	14	38	58.6	+	38	21 42	7.34
19821	14	40	38.2	+	36	58 07	7.26
19867	14	43	08.1	+	32	59 57	6.47

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1416.0 + 3802	medium compact	120	3.2	D	10
1416.2 + 3606	open	161	13.1	Near	14
1418.5 + 3545	medium compact	142	4.2	D	13
1419.2 + 3616	compact	87	1.8	VD	11
1420.0 + 3734	medium compact	156	3.6	VD	12
1420.2 + 3417	medium compact	100	1.9	ED	32
1421.0 + 3224	medium compact	96	2.1	VD	1
1422.7 + 3241	medium compact	104	1.3	ED	2
1423.9 + 3804	compact	174	3.2	VD	24
1424.3 + 3227	compact	202	1.5	ED	3
1425.6 + 3305	medium compact	302	6.5	D	6
1428.0 + 3225	open	120	1.6	VD	4
1431.0 + 3459	medium compact	84	1.3	ED	31
1431.6 + 3614	medium compact	72	1.8	VD	23
1431.8 + 3235	open	114	2.9	VD	5
1432.8 + 3645	compact	114	1.7	ED	22
1434.4 + 3620	medium compact	108	1.7	ED	21
1434.9 + 3341	medium compact	127	2.2	ED	30
1436.4 + 3252	open	197	5.4	D	7
1436.8 + 3249	compact	71	1.1	ED	8
1437.4 + 3707	compact	47	0.5	ED	20
1437.4 + 3725	medium compact	104	3.4	MD	19
1438.8 + 3741	compact	64	1.1	ED	18
1439.9 + 3415	medium compact	148	4.6	D	29
1440.3 + 3243	open	97	2.5	D	9
1442.7 + 3611	medium compact	93	3.6	D	27
1443.1 + 3639	medium compact	71	1.1	ED	17
1443.8 + 3504	medium compact	153	5.0	MD	26
1444.2 + 3820	medium compact	109	2.0	ED	15
1444.7 + 3757	compact	78	1.2	ED	33
1444.9 + 3322	medium compact	144	3.0	MD	28
1445.0 + 3723	medium compact	61	1.7	ED	16
1447.1 + 3355	medium compact	124	3.8	D	25

Average number of galaxies per cluster = 119.5

## GALAXIES

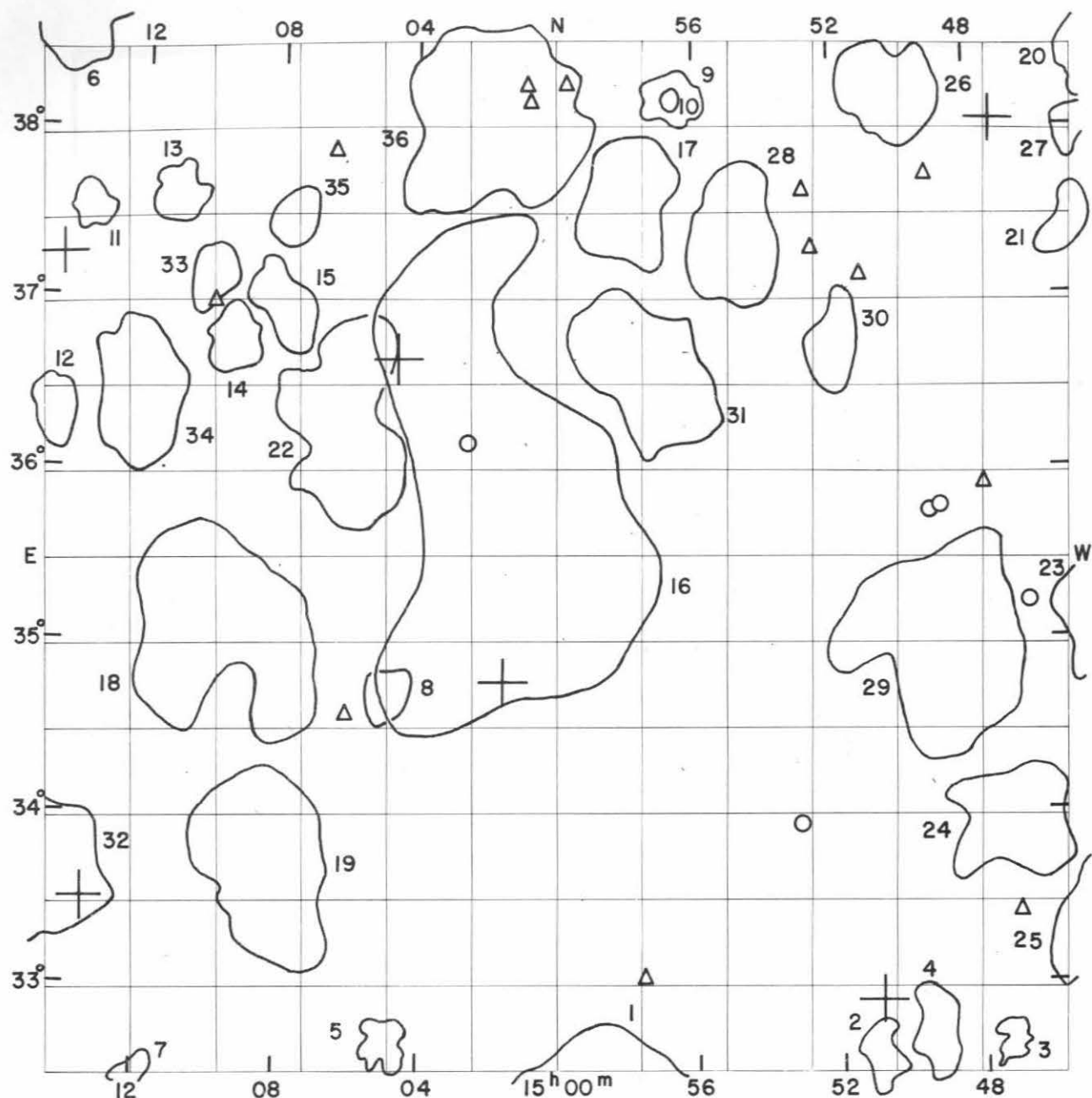
Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
14	17.2	+ 37 14		15.7		
14	17.5	+ 36 22	5572	15.2		
14	18.3	+ 35 25	5579	14.7		
14	19.3	+ 35 29	5589	14.3		
14	19.4	+ 38 20		15.1		
14	19.5	+ 35 25	5590	13.6		
14	20.4	+ 37 20	5596	14.5		
14	20.7	+ 38 13		15.0		double system
14	20.8	+ 33 04		14.5		
14	21.0	+ 38 21		15.6		
14	21.6	+ 34 14		14.4		
14	21.7	+ 34 15		15.1		
14	22.0	+ 33 15	5611	13.5		
14	22.0	+ 35 05	5614	12.6	+ 3872	$m_H = 12.9$ E, halo + plume
14	22.2	+ 36 40	5616	14.8		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
14	22.5	+ 35	30		15.4		
14	22.6	+ 35	29		15.4		
14	22.8	+ 38	28		15.2		
14	23.2	+ 32	42		14.2		
14	23.4	+ 34	04		15.6		very diffuse spiral
14	25.0	+ 33	28	5623	13.7		
14	25.3	+ 37	41	4435*	15.3		
14	25.6	+ 33	37		15.6		
14	25.6	+ 34	25		15.4		
14	26.3	+ 32	37		14.8		
14	26.3	+ 33	28		14.9		
14	26.3	+ 35	37		15.3		
14	26.4	+ 36	42		15.7		
14	26.9	+ 36	10		15.5		
14	27.5	+ 35	40	5646	15.2		
14	27.7	+ 35	47		15.4		double system
14	27.9	+ 36	35	5654	14.1		double nucleus
14	27.9	+ 37	05		15.5		
14	28.3	+ 35	32	5656	12.7		
14	29.3	+ 33	27		14.6		
14	29.8	+ 33	51		15.2		double system
14	29.9	+ 36	31		15.3		double system
14	30.6	+ 36	31	5675	14.0		
14	30.7	+ 36	55		15.5		
14	31.2	+ 34	57		15.6		
14	31.5	+ 36	10		15.5		
14	31.6	+ 35	31		15.7		
14	32.2	+ 37	24		15.7		
14	33.5	+ 37	01		15.3		
14	33.7	+ 35	17		15.7		
14	33.8	+ 36	45	5684	14.2		
14	33.9	+ 36	56		15.3		
14	34.0	+ 36	43	5686	15.2		
14	35.3	+ 36	46	5695	13.9		
14	36.0	+ 37	13		15.7		
14	37.1	+ 38	20		15.6		
14	38.4	+ 34	12	5727	14.6		
14	39.6	+ 36	57		15.7		
14	40.5	+ 37	40	4492*	15.6		compact
14	40.8	+ 38	05		15.7		
14	41.9	+ 33	37	4496*	15.0		
14	42.5	+ 37	41	4500*	15.6		
14	44.3	+ 32	59		14.5		
14	44.3	+ 34	35		14.4		
14	44.4	+ 32	51		15.6		
14	44.5	+ 33	37	4505*	15.1		
14	44.6	+ 33	36	4506*	15.5		
14	46.4	+ 35	12		14.9		

MAGNITUDES AND TYPES FROM OTHER SOURCES							
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958
5614	-	-	-	-	12.5	Sa	-





FIELD No. 193

$15^{\text{h}}00^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 1610

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
19949	14	47	08.9	+ 38 00 59	5.98
20027	14	50	49.0	+ 32 53 41	6.87
20265	15	01	35.8	+ 34 45 39	6.43
20329	15	04	37.5	+ 36 38 49	6.30
20523	15	13	29.2	+ 33 30 01	3.54
20543	15	14	26.9	+ 37 15 07	7.08



## CLUSTERS OF GALAXIES

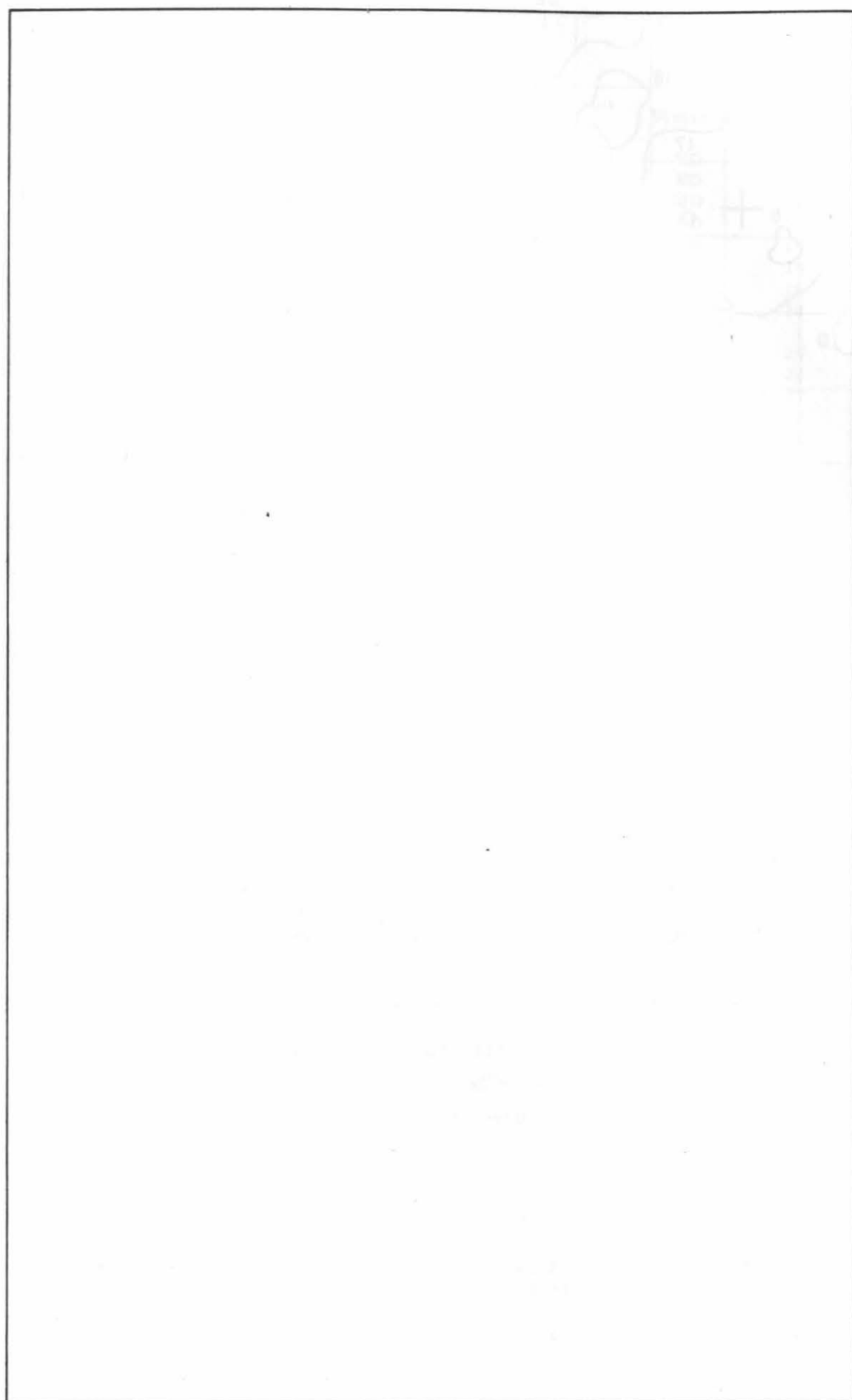
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1443.8 + 3504	medium compact	153	5.0	MD	23
1444.2 + 3820	medium compact	109	2.0	ED	20
1444.7 + 3757	compact	78	1.2	ED	27
1444.9 + 3322	medium compact	144	3.0	MD	25
1445.0 + 3723	medium compact	61	1.7	ED	21
1447.1 + 3355	medium compact	124	3.8	D	24
1447.2 + 3238	medium compact	101	1.1	ED	3
1448.9 + 3456	open	149	5.9	D	29
1449.3 + 3241	medium compact	121	2.0	D	4
1450.2 + 3811	compact	224	3.2	ED	26
1450.9 + 3233	medium compact	76	1.6	VD	2
1452.0 + 3642	compact	103	2.1	VD	30
1454.8 + 3719	medium compact	118	3.6	VD	28
1456.5 + 3810	medium compact	79	1.6	VD	9
1456.6 + 3810	compact	51	0.5	ED	10
1457.3 + 3634	medium compact	124	4.5	D	31
1458.0 + 3733	open	91	3.5	VD	17
1458.9 + 3218	medium compact	165	4.8	MD	1
1501.5 + 3550	medium compact	152	10.6	Near	16
1501.8 + 3803	medium compact	218	5.9	D	36
1504.8 + 3239	compact	131	1.4	ED	5
1504.9 + 3442	compact	98	1.5	VD	8
1506.2 + 3615	medium compact	147	4.8	MD	22
1507.7 + 3727	medium compact	114	1.6	ED	35
1507.9 + 3656	medium compact	112	2.3	VD	15
1508.2 + 3341	medium compact	145	5.0	D	19
1509.4 + 3645	compact	114	1.9	ED	14
1509.7 + 3502	compact	173	5.9	D	18
1510.0 + 3707	compact	118	1.6	ED	33
1511.1 + 3735	medium compact	85	1.8	ED	13
1511.9 + 3227	medium compact	86	1.1	ED	7
1512.1 + 3627	open	127	3.5	VD	34
1513.6 + 3731	medium compact	76	1.4	ED	11
1514.3 + 3837	medium compact	158	3.0	MD	6
1514.6 + 3619	compact	89	1.7	ED	12
1515.1 + 3337	medium compact	146	5.1	D	32

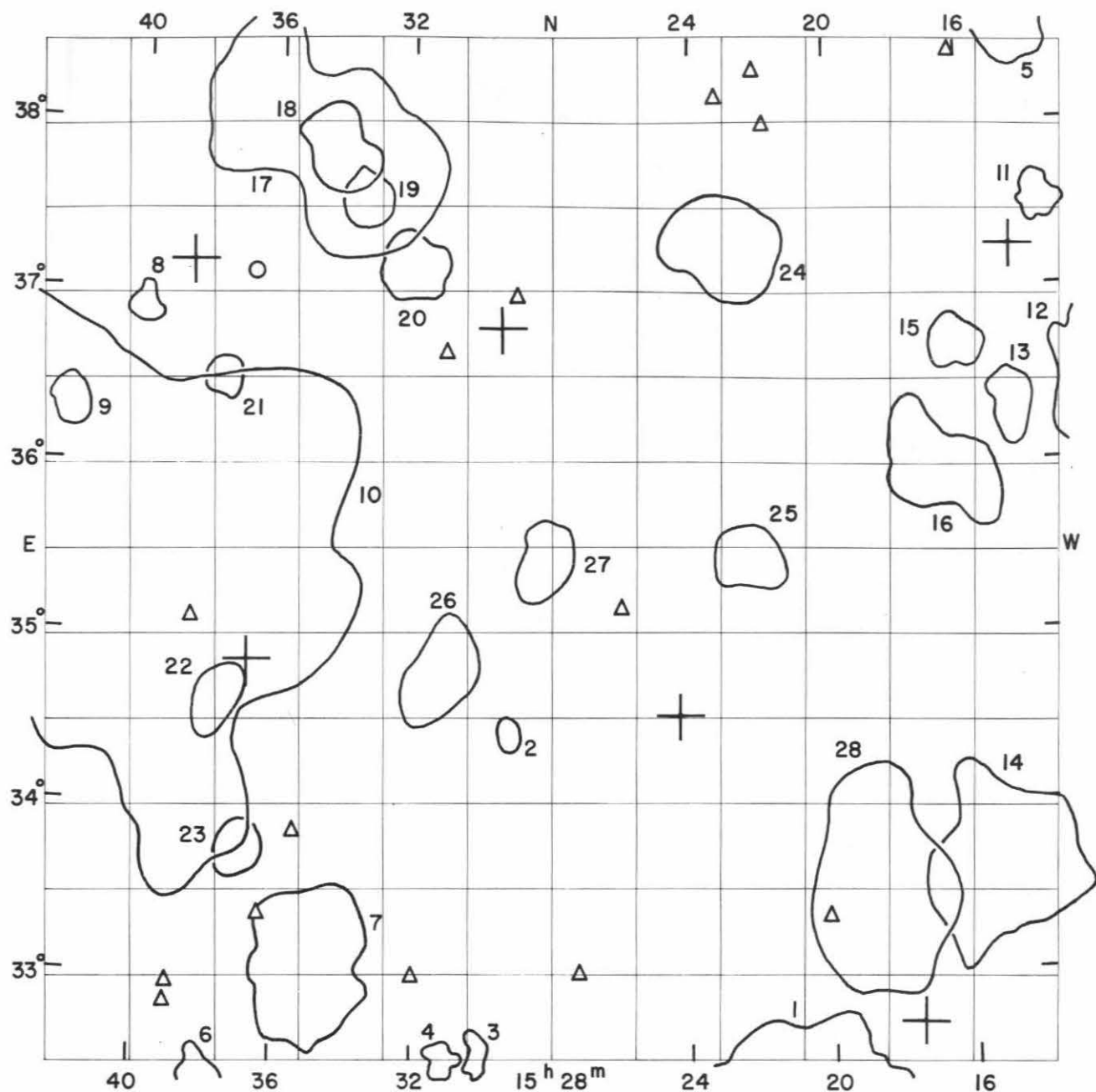
Average number of galaxies per cluster = 121.1

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
14	46.4	+35 12		14.9		
14	46.9	+33 24		15.7		
14	47.6	+35 54		15.7		compact
14	48.9	+35 47		14.5		
14	49.1	+37 42		15.6		
14	49.2	+35 45		14.2		lateral jets
14	51.1	+37 07		15.6		
14	52.5	+37 17		15.5		
14	52.8	+37 37	4519*	15.3		
14	53.0	+33 55	4520*	15.0		
14	57.5	+33 02		15.7		extremely diffuse spiral
14	59.7	+38 15		15.6		

Position			NGC IC*	m p	V s km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
15	00.7	+38.08		15.5		
15	00.8	+38.14		15.6		
15	02.5	+36.09		14.9		
15	06.1	+34.35		15.6		peculiar double nebula
15	06.5	+37.51		15.7		
15	10.0	+36.58		15.7		





FIELD No. 194

$15^{\text{h}}28^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 107

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
20543	15	14	26.9	+	37	15 07	7.08
20606	15	17	29.1	+	32	41 43	6.14
20761	15	24	19.9	+	34	30 32	5.87
20871	15	29	28.2	+	36	47 09	6.32
21048	15	36	52.9	+	34	50 13	6.19
21087	15	38	37.9	+	37	10 37	6.97

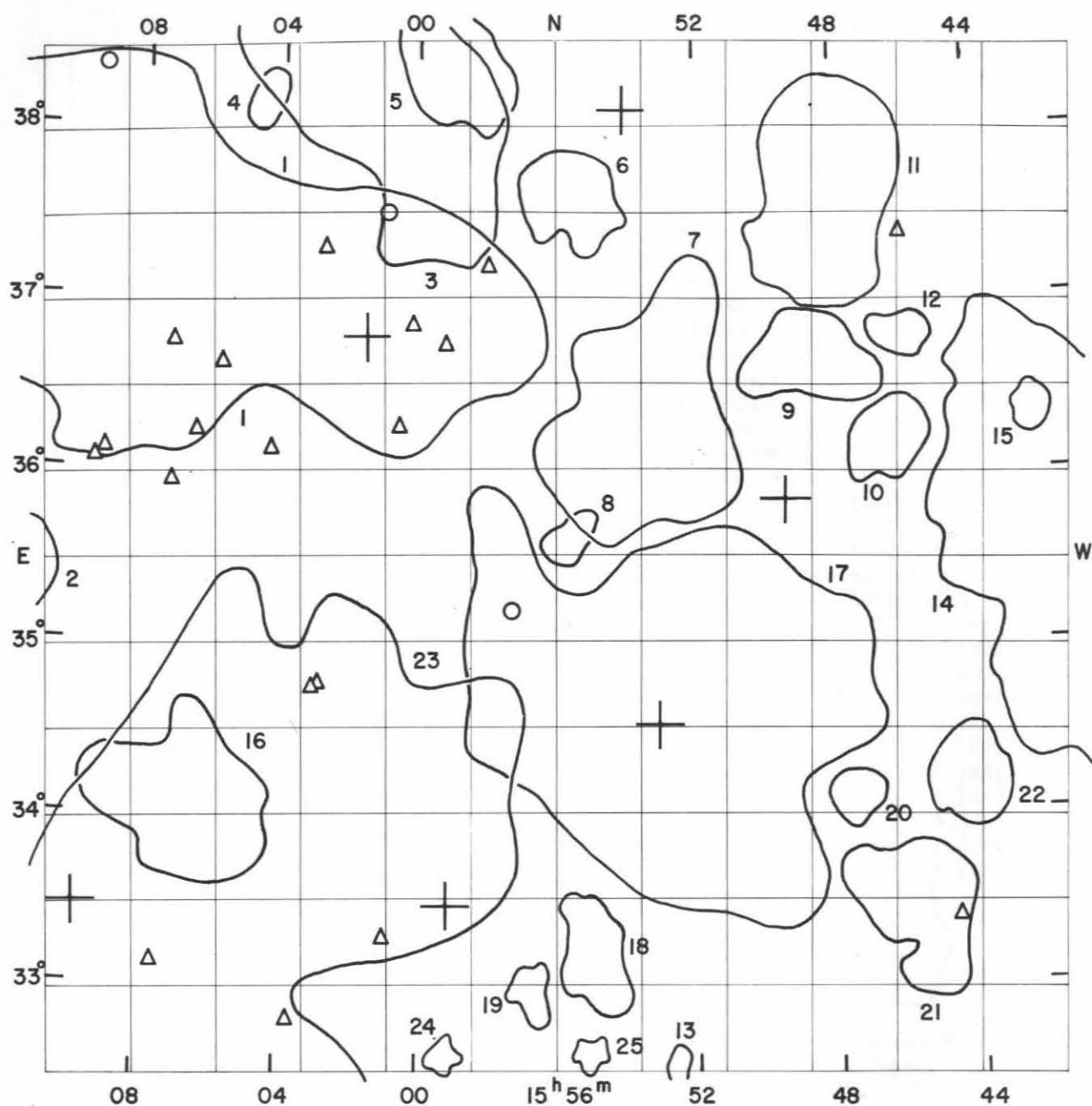
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1512.1 + 3627	open	127	3.5	VD	12
1513.6 + 3731	medium compact	76	1.4	ED	11
1514.3 + 3837	medium compact	158	3.0	MD	5
1514.6 + 3619	compact	89	1.7	ED	13
1515.1 + 3337	medium compact	146	5.1	D	14
1516.3 + 3641	compact	112	1.6	ED	15
1516.6 + 3559	medium compact	153	3.3	VD	16
1518.6 + 3327	medium compact	116	5.6	MD	28
1520.8 + 3207	medium compact	275	7.5	MD	1
1522.4 + 3527	compact	142	2.1	ED	25
1523.0 + 3716	medium compact	102	3.5	D	24
1528.1 + 3525	compact	86	2.0	ED	27
1529.2 + 3425	compact	56	0.8	ED	2
1530.1 + 3231	medium compact	90	1.0	ED	3
1531.0 + 3230	compact	80	1.1	ED	4
1531.2 + 3446	medium compact	88	2.7	VD	26
1532.1 + 3708	compact	100	2.1	ED	20
1533.6 + 3732	compact	77	1.6	ED	19
1534.4 + 3749	compact	170	2.5	VD	18
1534.7 + 3753	medium compact	126	6.7	D	17
1534.8 + 3300	medium compact	130	4.4	D	7
1537.0 + 3345	medium compact	60	1.7	VD	23
1537.6 + 3630	compact	78	1.2	ED	21
1537.7 + 3436	compact	270	1.9	ED	22
1537.9 + 3224	medium compact	110	1.4	ED	6
1539.4 + 3517	compact	460	13.4	MD	10
1540.0 + 3653	compact	51	1.1	ED	8
1542.1 + 3620	compact	78	1.4	VD	9

Average number of galaxies per cluster = 128.8

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
15	16.2	+ 38 24		15.4		
15	20.0	+ 33 20	4542*	15.1		double nebula
15	21.8	+ 37 59		15.7		double system
15	22.1	+ 38 18		15.3		
15	23.3	+ 38 08		15.4		
15	26.0	+ 35 09		15.7		
15	27.3	+ 33 00	4549*	15.5		
15	29.0	+ 36 58		15.6		
15	31.1	+ 36 38		15.5		
15	32.0	+ 32 59		15.4		
15	35.4	+ 33 50		15.5		
15	36.3	+ 33 20		15.2		
15	36.8	+ 37 07		14.7		
15	38.5	+ 35 05		15.7		
15	38.9	+ 32 57		15.3		
15	39.0	+ 32 50		15.6		



FIELD No. 195

$15^{\text{h}}56^{\text{m}} + 35^{\circ}30'$

Survey Plate No. 71

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
21319	15	49	20.8	+	35	48 41	4.77
21385	15	53	02.2	+	34	30 27	6.95
21402	15	53	58.4	+	38	05 25	5.47
21527	15	59	07.8	+	33	27 12	5.43
21590	16	01	29.0	+	36	46 06	5.85
21792	16	09	45.0	+	33	28 12	6.41

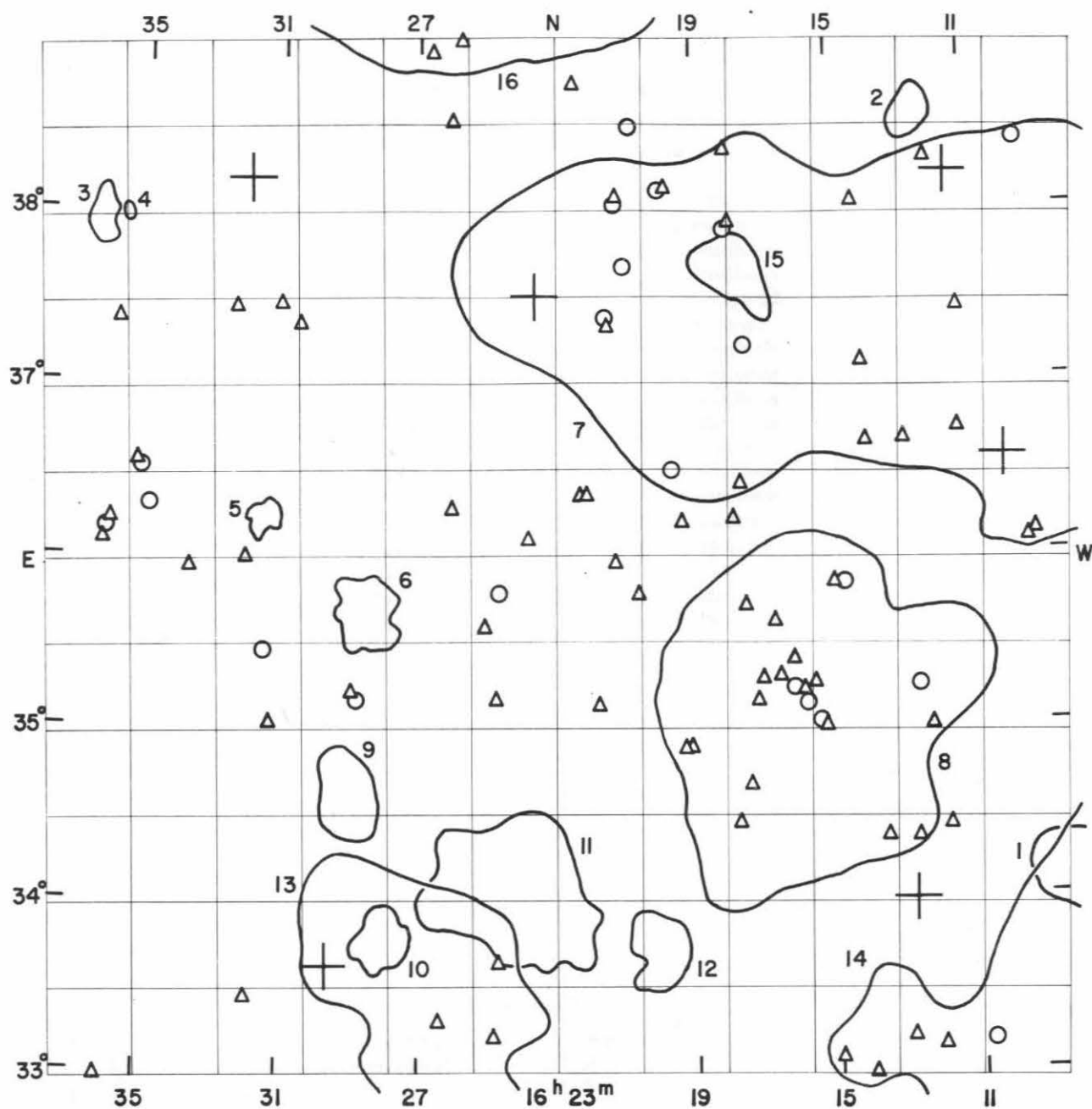
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1539.4 + 3517	compact	460	13.4	MD	14
1542.1 + 3620	compact	78	1.4	VD	15
1544.3 + 3412	medium compact	92	2.8	VD	22
1545.9 + 3325	medium compact	224	4.0	D	21
1546.0 + 3646	compact	73	1.6	ED	12
1546.4 + 3610	compact	157	2.6	ED	10
1547.5 + 3405	compact	79	1.6	VD	20
1548.1 + 3735	medium compact	101	5.9	D	11
1548.6 + 3637	medium compact	153	3.5	ED	9
1552.5 + 3435	medium compact	285	12.3	Near	17
1552.6 + 3230	compact	75	0.9	ED	13
1553.4 + 3614	medium compact	280	6.7	VD	7
1555.0 + 3235	medium compact	83	0.9	ED	25
1555.0 + 3310	medium compact	123	2.8	VD	18
1555.6 + 3735	medium compact	92	3.2	D	6
1555.7 + 3535	compact	99	1.5	VD	8
1556.7 + 3257	medium compact	53	1.5	ED	19
1559.0 + 3819	medium compact	99	3.7	D	5
1559.2 + 3234	medium compact	111	1.1	ED	24
1600.8 + 3804	medium compact	190	7.7	MD	3
1604.6 + 3807	compact	73	1.5	ED	4
1606.4 + 3404	medium compact	133	5.2	MD	16
1608.5 + 3044	medium compact	1775	31.8	Near	23
1611.6 + 3717	open	351	18.4	Near	1
1615.8 + 3505	medium compact	172	10.6	Near	2

Average number of galaxies per cluster = 216.4

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
15	44.6	+33 22		15.5		diffuse
15	45.9	+37 21		15.2		very compact
15	57.3	+35 10		14.9		
15	57.9	+37 10		15.1		
15	59.2	+36 44		15.6		
16	00.1	+36 50		15.5		
16	00.5	+36 15		15.3		compact
16	00.8	+37 29	6038	14.4		
16	01.0	+33 16		15.7		extremely faint jets
16	02.7	+37 17		15.7		extremely faint jets
16	02.9	+34 45		15.4		double system
16	03.1	+34 44		15.3		
16	03.6	+32 47		15.6		
16	04.3	+36 07		15.7		
16	05.8	+36 37		15.7		
16	06.5	+36 13		15.6		
16	07.2	+35 55		15.4		
16	07.2	+36 45		15.6		
16	07.5	+33 08		15.7		
16	09.1	+36 07		15.4		
16	09.3	+38 23		15.0		
16	09.4	+36 05		15.3		compact, jet



FIELD No. 196

$16^{\text{h}}23^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 1093

# GC STARS

Nos.	R. A.			Decl.	$m_p$
	h	m	s		
21800	16	09	58.3	+ 36 33 10	5.68
21833	16	11	26.0	+ 38 11 53	7.03
21863	16	12	48.3	+ 33 59 02	5.36
22108	16	23	37.2	+ 37 30 24	5.53
22235	16	29	37.9	+ 33 37 10	6.74
22285	16	31	56.9	+ 38 11 35	6.59



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1606.4 + 3404	medium compact	133	5.2	MD	1
1608.5 + 3044	medium compact	1775	31.8	Near	14
1611.6 + 3717	open	351	18.4	Near	7
1612.6 + 3832	compact	87	1.3	VD	2
1615.8 + 3505	medium compact	172	10.6	Near	8
1617.8 + 3739	medium compact	80	2.2	D	15
1620.1 + 3343	medium compact	53	2.1	VD	12
1624.2 + 3403	medium compact	210	4.9	VD	11
1625.5 + 4006	medium compact	686	16.3	Near	16
1626.6 + 3326	open	75	7.8	Near	13
1628.0 + 3346	compact	52	1.8	ED	10
1628.5 + 3540	compact	126	2.2	ED	6
1629.0 + 3436	medium compact	70	2.4	VD	9
1631.5 + 3613	compact	58	1.0	ED	5
1635.7 + 3800	compact	48	0.3	ED	4
1636.4 + 3758	medium compact	56	1.3	VD	3

Average number of galaxies per cluster = 252.0

## GALAXIES

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
16 09.1	+ 36 07			15.4		
16 09.3	+ 38 23			15.0		
16 09.4	+ 36 05			15.3		compact, jet
16 10.7	+ 33 10		6089	15.0		double system, bridge + jet
16 11.2	+ 37 25			15.5		
16 11.3	+ 36 43			15.7		diffuse spiral
16 11.7	+ 34 25			15.7		
16 12.0	+ 38 17			15.2		compact
16 12.1	+ 33 08			15.7		
16 12.2	+ 35 00			15.3		compact
16 12.5	+ 35 14		6097	14.9		
16 12.7	+ 34 21			15.2		compact
16 12.9	+ 36 40			15.7		compact
16 13.0	+ 33 11			15.7		compact, faint jet
16 13.5	+ 34 21			15.6		very compact
16 13.9	+ 36 39		1208*	15.3		
16 14.0	+ 37 07			15.5		
16 14.1	+ 32 58			15.6		
16 14.2	+ 38 02			15.5		
16 14.7	+ 35 50		6104	14.1		
16 15.0	+ 33 03			15.7		
16 15.0	+ 35 50			15.4		
16 15.2	+ 35 00		6105	15.3		
16 15.4	+ 35 01		6107	14.7		compact
16 15.5	+ 35 15		6108	15.4		
16 15.7	+ 35 07		6109	14.9		compact
16 15.8	+ 35 13		6110	15.6		
16 16.1	+ 35 14		6112	14.8		compact
16 16.1	+ 35 23			15.7		
16 16.5	+ 35 18		6114	15.3		
16 16.7	+ 35 37			15.2		
16 17.0	+ 35 17		6116	15.3		

a	Position 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
	h	m	s				
16	17.2	+	35 10		15.7		
16	17.4	+	34 40		15.4		
16	17.5	+	35 42		15.7		
16	17.5	+	37 13	6117	14.7		
16	17.6	+	36 24		15.6		
16	17.8	+	34 27		15.5		compact
16	17.8	+	36 12		15.3		
16	17.9	+	37 56	6119	15.4		
16	18.0	+	37 54	6120	14.3		
16	18.0	+	38 21		15.4		
16	19.1	+	34 53		15.6		very compact
16	19.3	+	36 10		15.4		
16	19.3	+	34 53		15.4		compact
16	19.6	+	36 30	6126	14.5		
16	19.8	+	38 07		15.6		
16	20.0	+	38 06	6129	14.7		
16	20.6	+	35 46		15.3		
16	20.9	+	38 29		14.9		very compact
16	21.0	+	37 40		15.0		
16	21.2	+	38 04		15.5		
16	21.3	+	38 02	6137	14.1		
16	21.3	+	35 57		15.3		
16	21.5	+	37 19		15.6		
16	21.6	+	37 22	6142	14.8		
16	21.8	+	35 07		15.1		compact
16	22.1	+	36 20		15.2		
16	22.3	+	36 20		15.7		
16	22.5	+	38 43		15.6		
16	23.8	+	36 05		15.7		
16	24.6	+	35 47		15.0		
16	24.7	+	33 38		15.7		very compact
16	24.7	+	35 10		15.7		
16	24.8	+	33 12		15.6		
16	25.1	+	35 35		15.6		
16	25.8	+	38 58		15.5		
16	26.0	+	36 15		15.5		
16	26.0	+	38 31		15.4		
16	26.4	+	33 17		15.6		
16	26.6	+	38 55		15.1		compact
16	28.8	+	35 10	6177	14.8		
16	28.9	+	35 13	6179	15.7		extremely compact
16	30.5	+	37 20		15.7		
16	31.0	+	37 27		15.2		
16	31.3	+	35 01		15.5		
16	31.4	+	35 26	6185	14.5		
16	31.9	+	33 25		15.1		
16	32.0	+	35 59		15.7		
16	32.3	+	37 26		15.6		
16	33.6	+	35 56		15.5		
16	34.8	+	36 17	6194	14.6		
16	35.1	+	36 31		15.0		
16	35.2	+	36 33		15.5		
16	35.8	+	37 22		15.4		
16	36.0	+	32 58		15.4		compact
16	36.0	+	36 13	4614*	15.3		
16	36.1	+	36 10	4615*	14.2		
16	36.2	+	36 05	4616*	15.4		

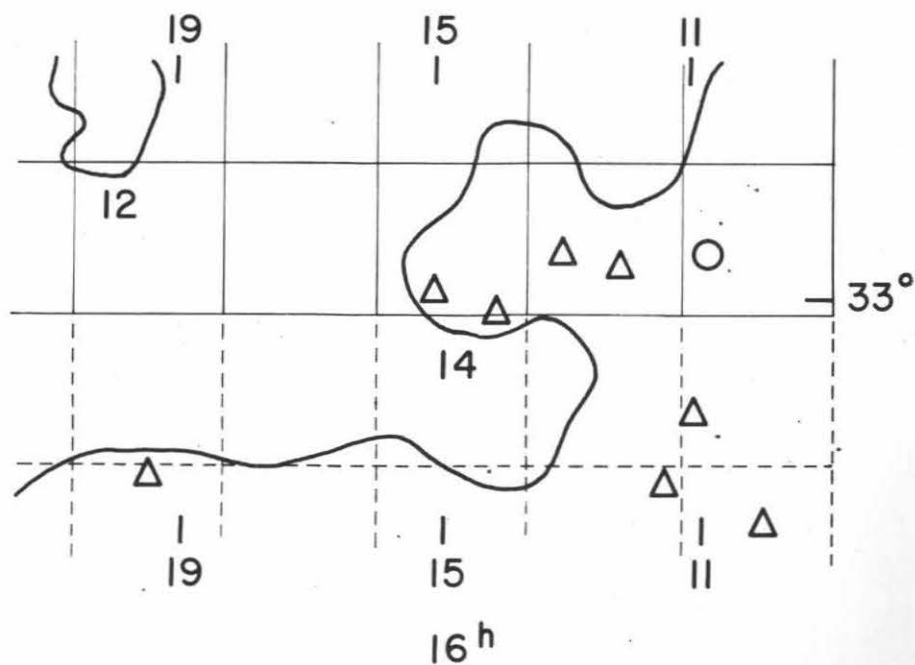
An area of almost 1 square degree at the S.W. corner of this plate is not covered by any of the adjacent fields. It is outlined by

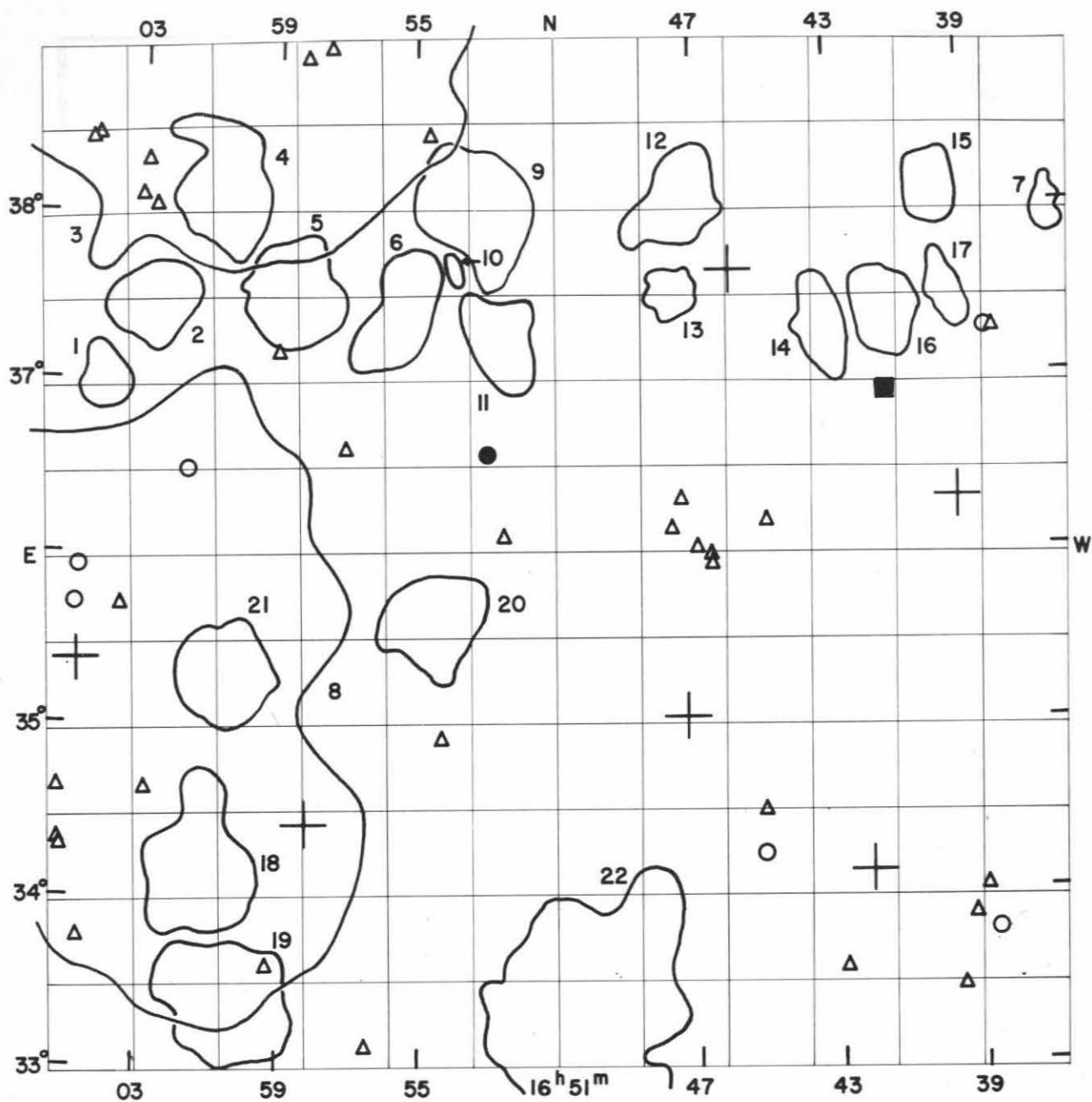
$$16^{\text{h}}10^{\text{m}} < \alpha < 16^{\text{h}}18^{\text{m}}, \quad 32^{\circ}30' < \delta < 33^{\circ}00'$$

and plotted on the following special map, together with some of its surroundings.

Galaxies on special map

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
16	09.9	+32 15	6089	15.6		double nebula, collision
16	10.7	+33 10		15.0		double system, bridge + jet
16	11.0	+32 38		15.3		
16	11.4	+32 25		15.7		
16	12.1	+33 08		15.7		
16	13.0	+33 11		15.7		compact, faint jet
16	14.1	+32 58		15.6		
16	15.0	+33 03		15.7		
16	19.3	+32 28		15.5		





FIELD No. 197

$16^{\text{h}}51^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 1069

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
22462	16	39	16.7	+	36	17 45	7.19
22522	16	42	00.9	+	34	07 47	5.90
22618	16	45	52.8	+	37	38 51	6.97
22646	16	47	15.0	+	35	02 31	6.77
22933	16	58	20.4	+	34	24 41	7.05
23106	17	04	54.0	+	35	23 19	7.19

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1636.4 + 3758	medium compact	56	1.3	VD	7
1639.5 + 3729	medium compact	61	1.6	VD	17
1639.9 + 3805	compact	98	2.0	VD	15
1641.3 + 3723	compact	87	2.5	VD	16
1643.1 + 3717	medium compact	74	2.3	VD	14
1647.4 + 3801	compact	57	2.8	VD	12
1647.6 + 3730	compact	72	1.6	VD	13
1649.9 + 3320	open	146	6.9	Near	22
1652.6 + 3714	medium compact	58	2.6	D	11
1653.3 + 3800	medium compact	87	3.8	MD	9
1654.0 + 3738	compact	56	0.7	ED	10
1654.6 + 3535	medium compact	92	3.2	VD	20
1655.5 + 3723	medium compact	109	3.2	D	6
1658.6 + 3730	medium compact	103	3.4	D	5
1700.5 + 3322	compact	123	4.3	MD	19
1700.6 + 3516	medium compact	118	3.2	D	21
1700.7 + 3806	medium compact	96	3.6	VD	4
1701.3 + 3406	compact	246	4.0	D	18
1702.8 + 3725	open	64	2.7	VD	2
1702.9 + 3510	medium compact	273	16.6	Near	8
1704.1 + 3700	compact	64	1.8	ED	1
1707.6 + 4045	open	1021	29.8	Near	3

Average number of galaxies per cluster = 143.7

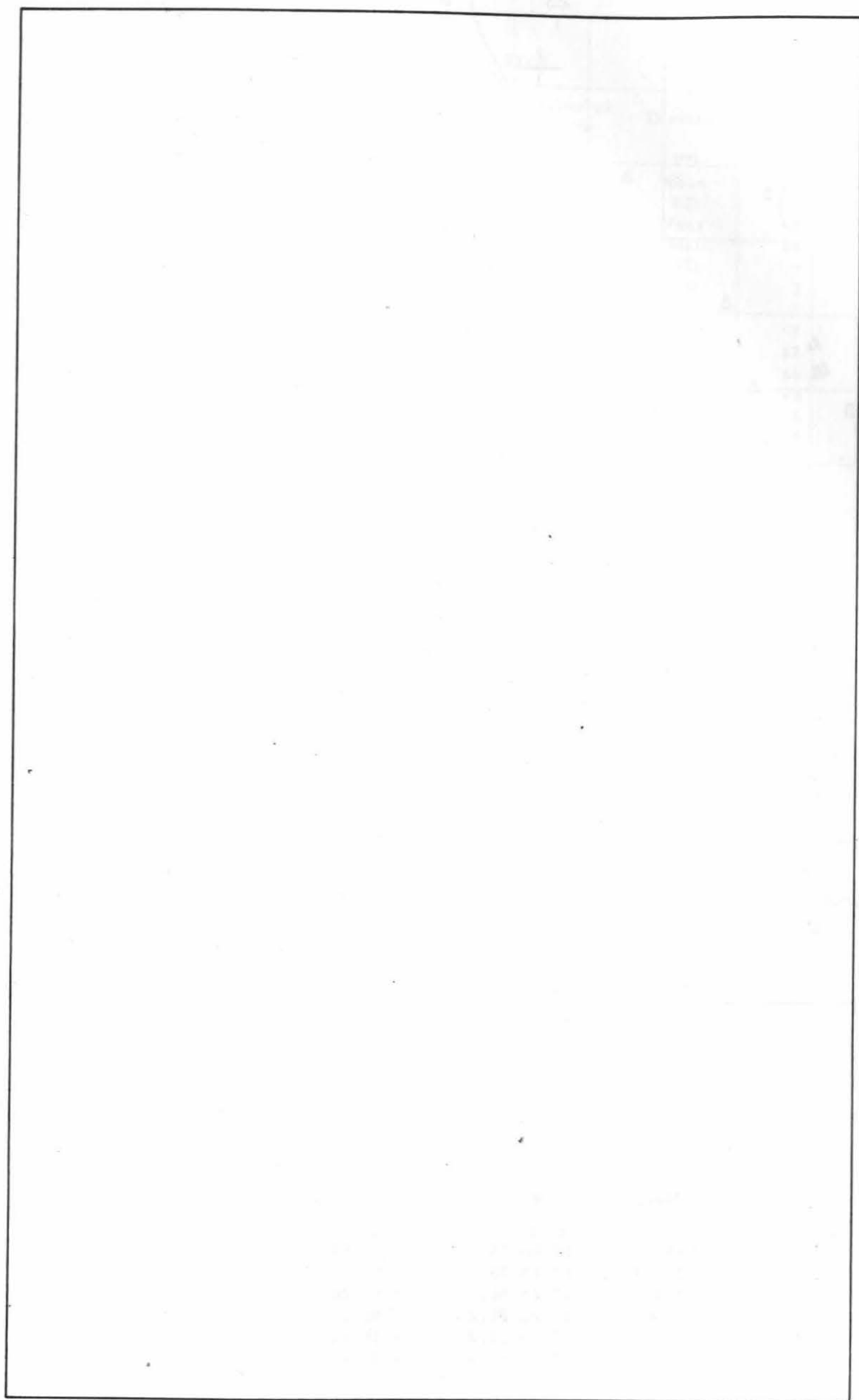
## GALAXIES

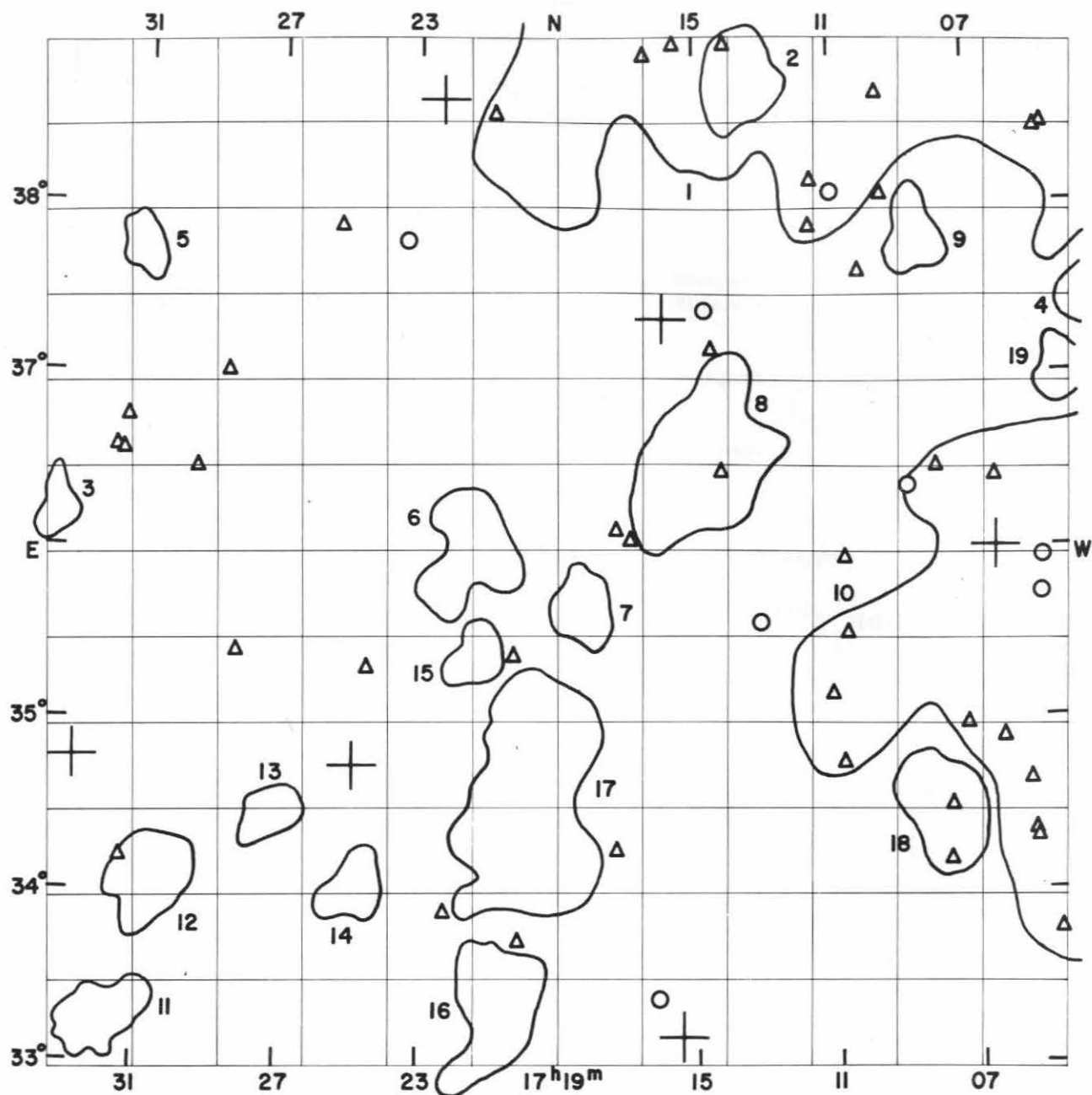
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o. i.				
16	38.1	+ 37 16		15.2		
16	38.3	+ 37 17		14.8		
16	38.5	+ 33 46		14.9		
16	38.8	+ 34 01		15.7		compact
16	39.1	+ 33 52		15.4		
16	39.5	+ 33 27		15.2		
16	41.3	+ 36 55	6207	11.9	+ 869	m <sub>H</sub> = 12.3 Sb
16	42.8	+ 33 34		15.7		compact
16	44.9	+ 36 10		15.4		
16	45.0	+ 34 30		15.1		
16	45.1	+ 34 15		14.7		
16	46.5	+ 35 55		15.3		
16	46.5	+ 35 59		15.3		compact
16	46.9	+ 36 01		15.5		
16	47.3	+ 36 18		15.2		
16	47.6	+ 36 08		15.7		
16	52.5	+ 36 05		15.7		
16	53.0	+ 36 35	6255	13.8		
16	54.3	+ 34 55		15.6		
16	54.7	+ 38 26		15.6		
16	56.6	+ 33 07		15.6		
16	57.2	+ 36 35		15.4		
16	57.6	+ 38 56		15.7		
16	58.3	+ 38 53		15.4		
16	59.1	+ 37 10		15.5		compact
16	59.3	+ 33 35	4638*	15.7		compact

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
17	01.8	+	36 29		14.5		
17	02.8	+	38 01		15.7		
17	02.9	+	34 38		15.5		very diffuse spiral
17	03.0	+	38 17		15.5		
17	03.2	+	38 05		15.3		
17	03.7	+	35 42		15.6		compact
17	04.6	+	38 27		15.5		diffuse spiral
17	04.7	+	33 45		15.5		
17	04.8	+	38 25		15.1		
17	04.9	+	35 56		14.7		compact
17	05.0	+	35 43		14.8		
17	05.2	+	34 18		15.7		
17	05.3	+	34 20		15.4		compact
17	05.4	+	34 38		15.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956	Holmberg 1958	
6207	11.8	Sc	12.13	Sc	12.0 Sc	-	-





FIELD No. 198

$17^{\text{h}}19^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 1132

GC STARS

Nos.	R. A.			Decl.			$m_p$
	h	m	s	o	'	"	
23132	17	06	15.6	+	35	59 56	5.38
23359	17	15	28.6	+	33	09 10	Var.
23374	17	15	56.7	+	37	20 34	4.80
23560	17	22	21.2	+	38	37 36	6.42
23647	17	24	58.2	+	34	44 11	5.91
23841	17	32	57.8	+	34	46 58	6.82



## CLUSTERS OF GALAXIES

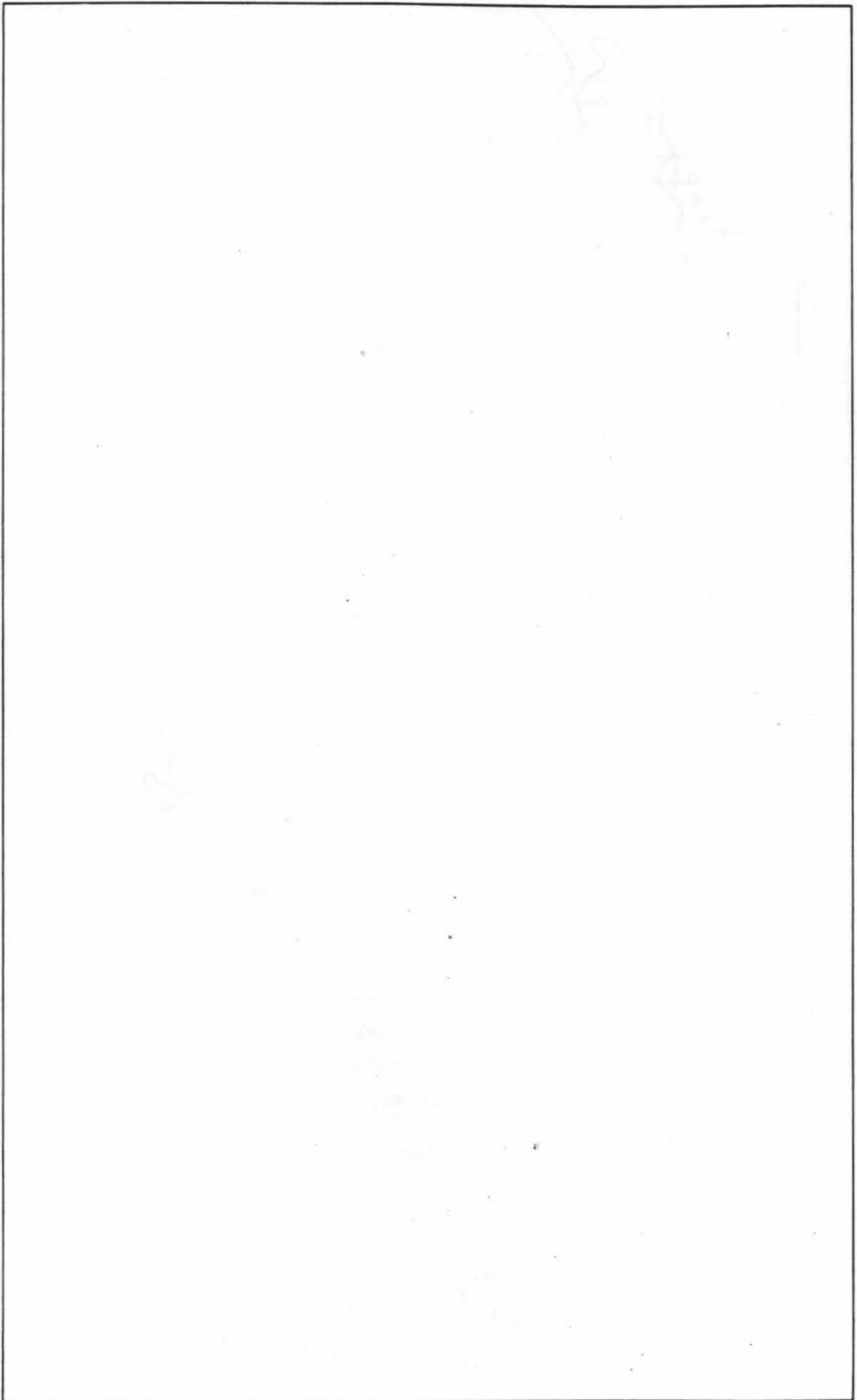
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1702.8 + 3725	open	64	2.7	VD	4
1702.9 + 3510	medium compact	273	16.6	Near	10
1704.1 + 3700	compact	64	1.8	ED	19
1707.6 + 4045	open	1021	29.8	Near	1
1707.9 + 3426	compact	110	3.3	MD	18
1708.4 + 3749	compact	55	2.3	VD	9
1713.6 + 3845	medium compact	103	2.9	MD	2
1714.7 + 3630	medium compact	101	4.9	MD	8
1718.3 + 3538	medium compact	88	2.2	ED	7
1719.8 + 3431	open	107	5.8	D	17
1720.4 + 3320	medium compact	87	3.6	D	16
1721.4 + 3523	compact	77	1.9	ED	15
1721.5 + 3600	medium compact	80	3.2	VD	6
1724.9 + 3401	compact	82	2.1	ED	14
1727.2 + 3427	open	57	1.9	ED	13
1730.6 + 3405	medium compact	79	2.9	VD	12
1731.1 + 3745	medium compact	61	1.6	VD	5
1731.8 + 3315	medium compact	93	2.3	VD	11
1733.6 + 3611	medium compact	60	1.6	ED	3

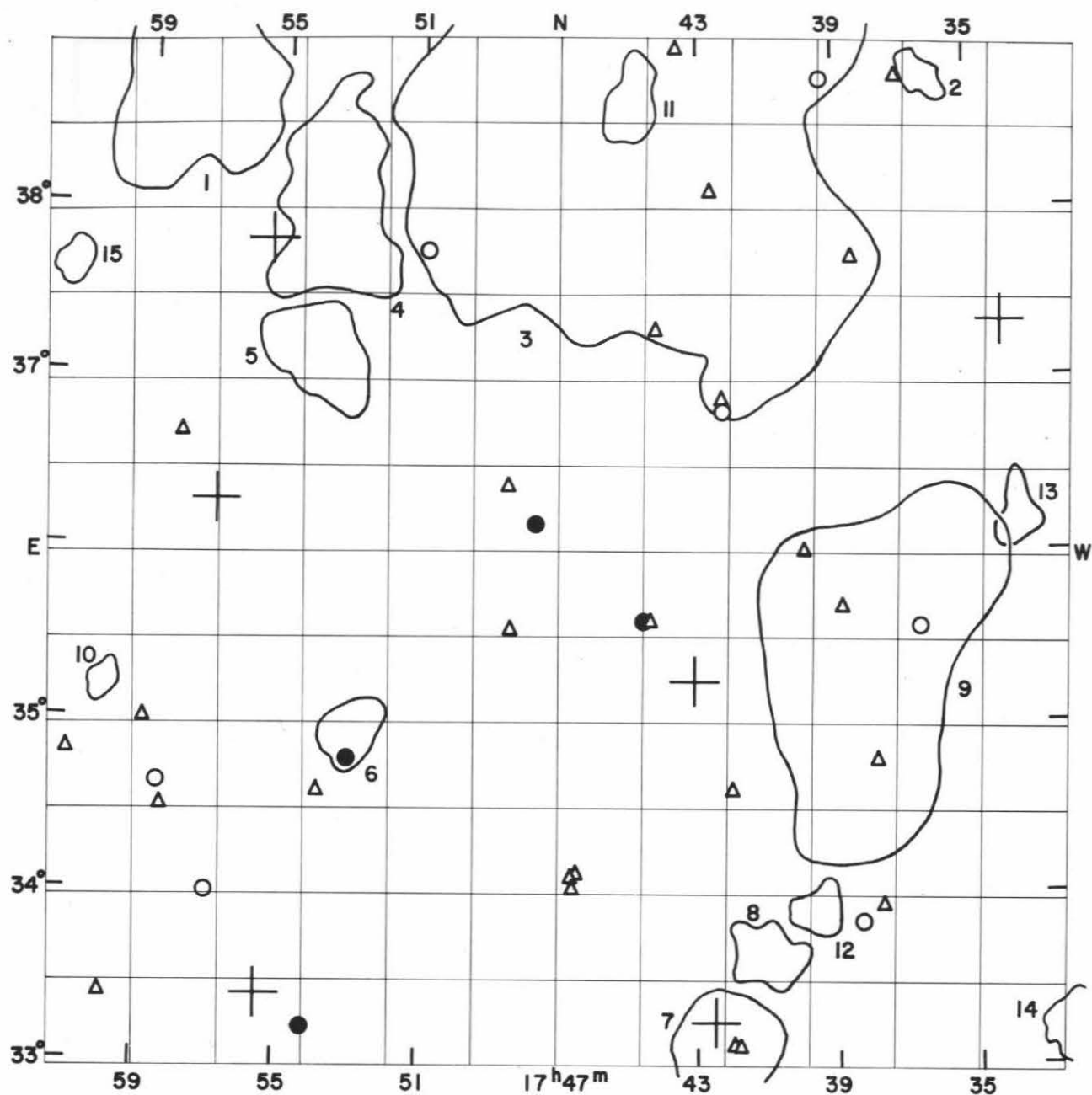
Average number of galaxies per cluster = 140.1

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o ' "				
17	04.6	+ 38 27		15.5		diffuse spiral
17	04.7	+ 33 45		15.5		
17	04.8	+ 38 25		15.1		
17	04.9	+ 35 56		14.7		compact
17	05.0	+ 35 43		14.8		
17	05.2	+ 34 18		15.7		
17	05.3	+ 34 20		15.4		compact
17	05.4	+ 34 38		15.7		
17	06.2	+ 34 53		15.2		
17	06.3	+ 36 25		15.7		
17	07.2	+ 34 58		15.7		compact
17	07.7	+ 34 29		15.3		
17	07.8	+ 34 10		15.4		
17	08.0	+ 36 28		15.4		
17	08.8	+ 36 21	1244*	14.7		
17	09.4	+ 38 04		15.6		
17	09.5	+ 38 39		15.7		
17	10.1	+ 37 37		15.2		
17	10.6	+ 35 30		15.3		
17	10.7	+ 35 57		15.1		
17	10.8	+ 34 45		15.5		
17	10.9	+ 38 05	1245*	15.0		
17	11.0	+ 35 09		15.4		
17	11.5	+ 38 08		15.6		
17	11.6	+ 37 53		15.4		
17	13.1	+ 35 34	1249*	14.9		
17	14.0	+ 38 56		15.6		compact
17	14.2	+ 36 26		15.6		
17	14.5	+ 37 10		15.7		

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
17	14.7	+ 37	23		14.9		
17	15.6	+ 38	57		15.5		
17	16.1	+ 33	23		14.6		
17	16.5	+ 38	53		15.7		very compact
17	16.9	+ 36	03		15.5		
17	17.3	+ 34	15		15.3		double system, connected
17	17.3	+ 36	06	6349	15.1		
17	20.2	+ 33	43		15.6		
17	20.3	+ 35	23		15.6		diffuse spiral
17	20.8	+ 38	32		15.5		
17	22.3	+ 33	53		15.2		
17	23.4	+ 37	48	6367	15.0		
17	24.6	+ 35	18		15.2		
17	25.3	+ 37	53		15.4		
17	28.3	+ 35	24		15.3		
17	28.7	+ 37	02		15.6		
17	29.5	+ 36	28		15.7		compact
17	31.5	+ 34	12		15.5		very compact
17	31.6	+ 36	46		15.5		quadruple system
17	31.7	+ 36	34		15.6		compact
17	31.9	+ 36	35		15.7		compact





FIELD No. 199

$17^{\text{h}}47^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 277

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	n	s	o	'	"	
23863	17	33	59.2	+	37	19 54	6.15
24082	17	42	27.0	+	33	14 45	7.04
24098	17	43	03.2	+	35	14 12	6.84
24433	17	55	27.2	+	37	48 25	6.96
24437	17	55	34.6	+	33	24 19	6.78
24488	17	56	57.6	+	36	17 27	5.98

## CLUSTERS OF GALAXIES

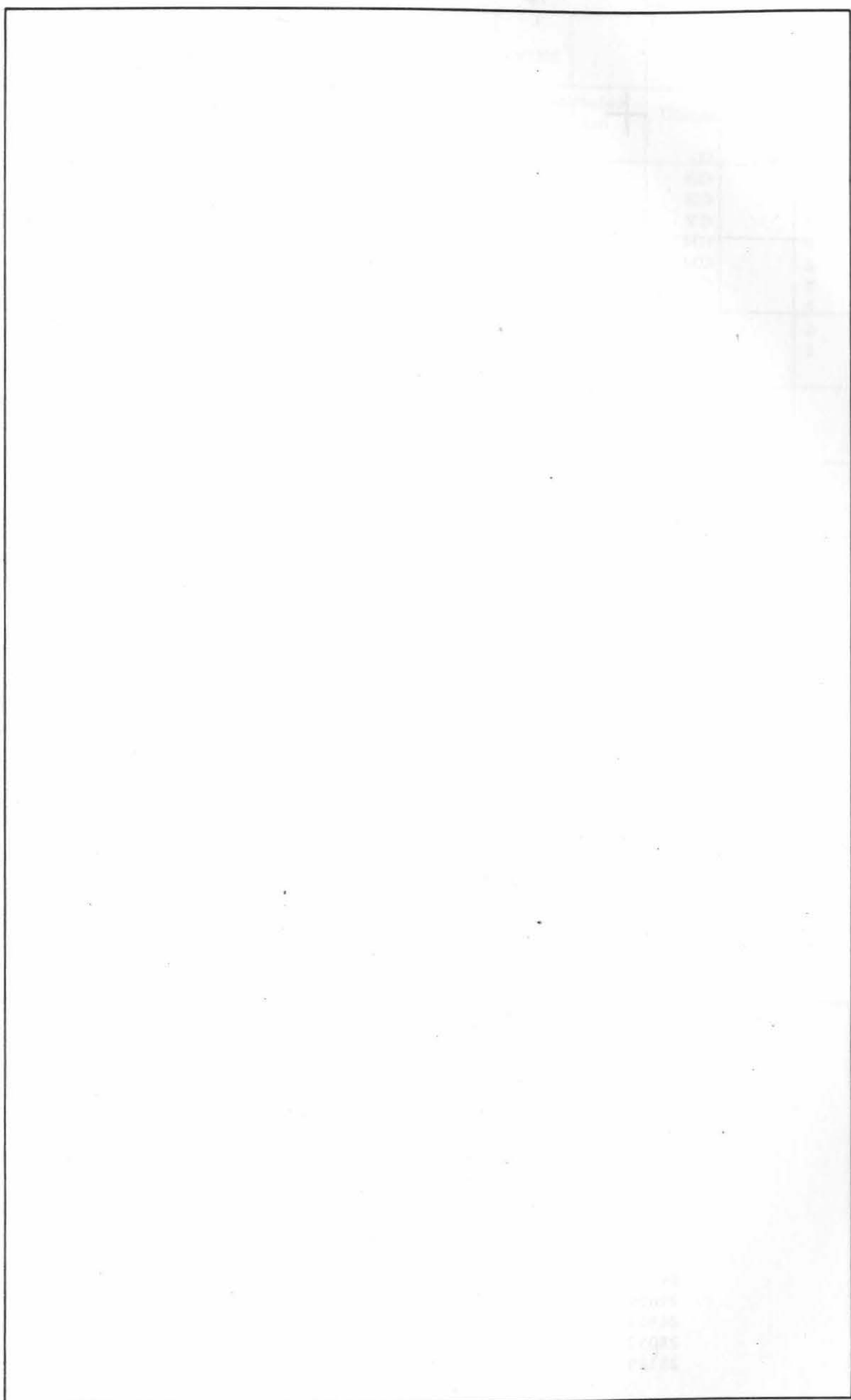
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1731.8 + 3315	medium compact	93	2.3	VD	14
1733.6 + 3611	medium compact	60	1.6	ED	13
1736.3 + 3846	compact	57	1.3	ED	2
1738.0 + 3516	medium compact	151	9.2	Near	9
1739.5 + 3354	medium compact	53	1.6	ED	12
1741.0 + 3337	medium compact	72	2.2	D	8
1742.1 + 3306	medium compact	86	3.4	MD	7
1744.5 + 3846	open	205	16.8	Near	3
1744.9 + 3836	medium compact	69	2.1	D	11
1753.0 + 3456	medium compact	53	2.0	VD	6
1753.6 + 3759	medium compact	98	5.0	MD	4
1754.0 + 3707	medium compact	75	3.3	D	5
1757.8 + 3842	open	97	6.1	D	1
1800.1 + 3512	compact	47	1.1	ED	10
1801.4 + 3739	compact	57	1.2	ED	15

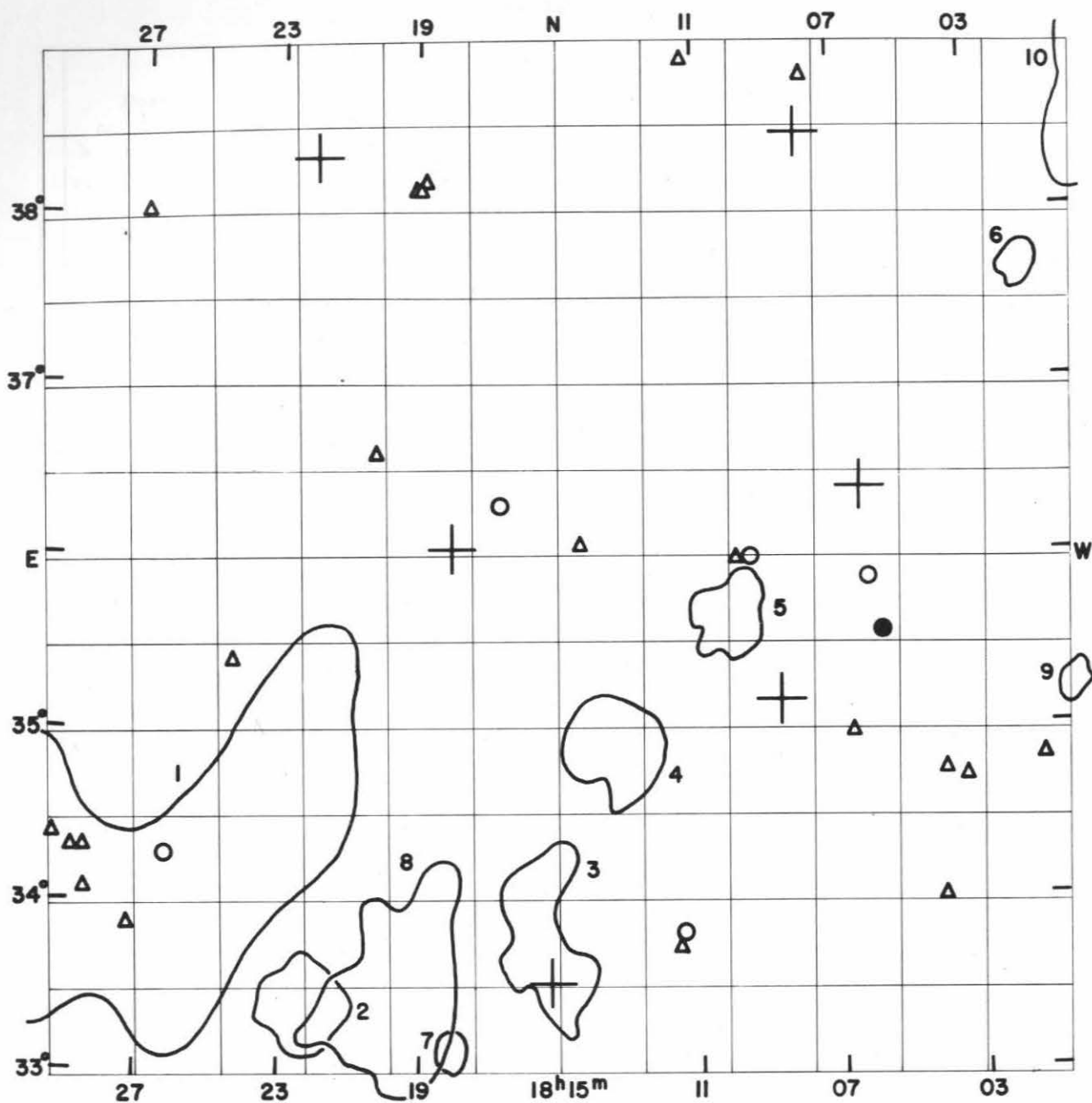
Average number of galaxies per cluster = 84.9

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
17	36.5	+ 35 33		14.9		
17	37.0	+ 38 45		15.4		
17	37.7	+ 33 55		15.7		very compact
17	37.8	+ 34 46		15.6		compact
17	38.2	+ 33 49		14.9		double system
17	38.4	+ 37 42		15.7		
17	38.8	+ 35 40		15.4		double system in halo
17	39.3	+ 38 44		15.0		
17	39.9	+ 36 00		15.5		
17	41.8	+ 33 05		15.7		compact
17	41.9	+ 33 06		15.7		
17	42.0	+ 34 36		15.6		compact
17	42.2	+ 36 48	6433	14.1		
17	42.2	+ 36 52		15.2		
17	42.6	+ 38 05		15.5		very compact
17	43.6	+ 38 55		15.6		
17	44.2	+ 37 17		15.7		very compact
17	44.3	+ 35 35	6446	15.5		
17	44.5	+ 35 35	6447	13.8		
17	46.4	+ 34 06		15.5		
17	46.5	+ 34 01		15.6		
17	46.6	+ 34 05		15.5		
17	47.7	+ 36 09		14.0		
17	48.4	+ 35 32		15.4		
17	48.5	+ 36 22		15.6		
17	50.9	+ 37 45		14.8		
17	53.0	+ 34 47		13.9		
17	53.9	+ 34 35		15.7		
17	54.2	+ 33 12	6504	13.4		
17	57.0	+ 34 00		14.8		
17	58.0	+ 36 40		15.3		
17	58.4	+ 34 30		15.6		
17	58.5	+ 34 38		14.4		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	'				
17	58.9	+ 35	00		15.7		
17	59.9	+ 33	23		15.7		
18	01.1	+ 34	48		15.7		





FIELD No. 200  
 $18^{\text{h}}15^{\text{m}} + 36^{\circ}00'$   
 Survey Plate No. 197

GC STARS

Nos.	R. A.			Decl.			$m_p$
	h	m	s	o	'	"	
24735	18	06	18.1	+	36	23 42	5.67
24778	18	07	58.0	+	38	27 12	6.40
24800	18	08	40.6	+	35	09 38	6.99
24968	18	15	16.8	+	33	30 55	7.07
25032	18	18	06.4	+	36	02 27	4.34
25129	18	22	02.9	+	38	19 01	6.83



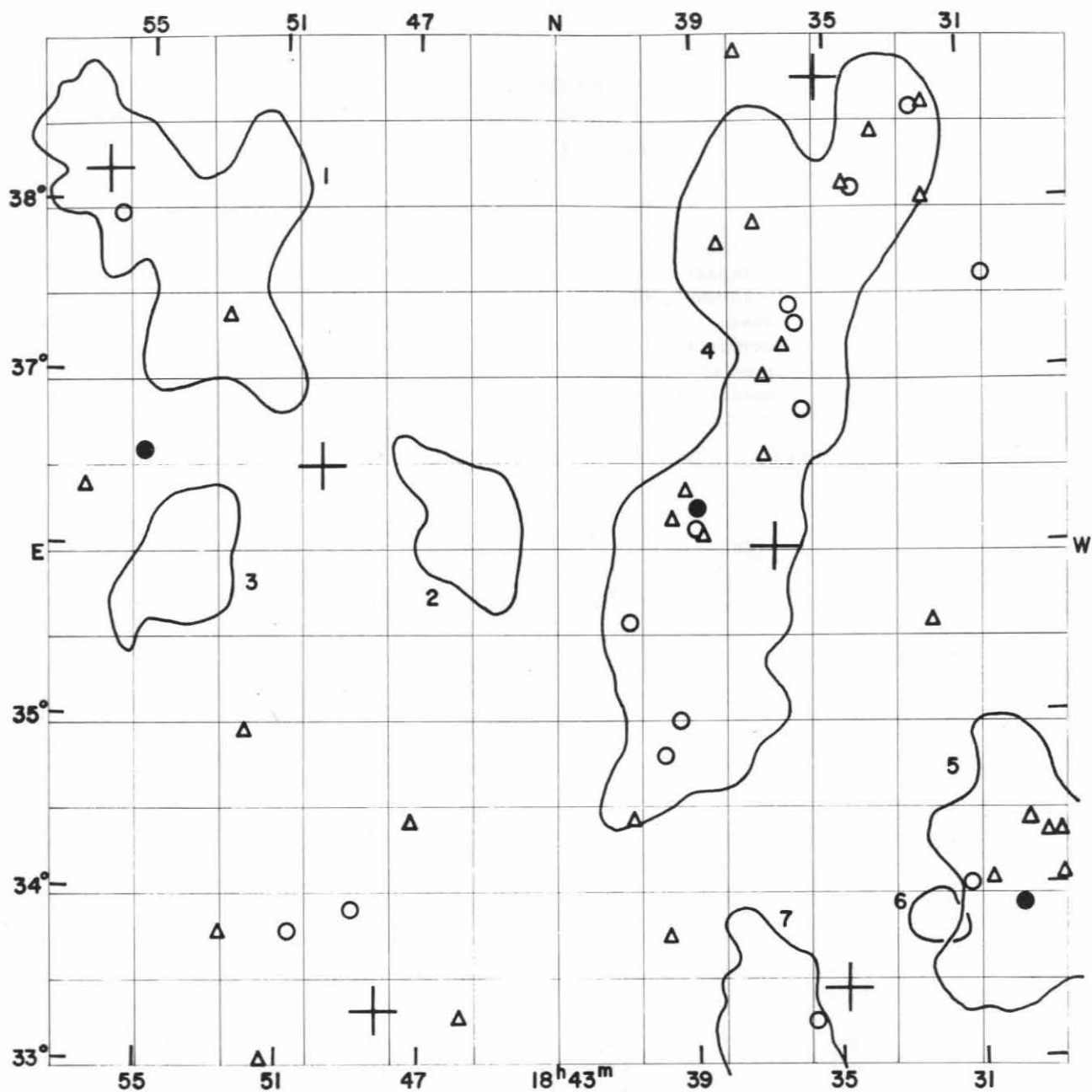
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1757.8 + 3842	open	97	6.1	D	10
1800.1 + 3512	compact	47	1.1	ED	9
1801.4 + 3739	compact	57	1.2	ED	6
1810.0 + 3538	compact	62	2.2	VD	5
1813.3 + 3452	medium compact	92	3.1	MD	4
1815.4 + 3346	open	57	3.7	MD	3
1818.0 + 3306	compact	41	1.1	ED	7
1819.4 + 3325	medium compact	110	5.4	MD	8
1822.2 + 3322	medium compact	79	2.8	D	2
1826.4 + 3410	medium compact	163	10.8	Near	1

Average number of galaxies per cluster = 80.5

## GALAXIES

Position a 1950 $\delta$ h m o			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
18 01.1	+	34 48		15.7		
18 03.3	+	34 42		15.5		
18 03.9	+	34 45		15.1		
18 04.0	+	34 00		15.3		
18 05.7	+	35 33		13.9		
18 06.0	+	35 52		14.8		
18 06.6	+	34 58		15.7		
18 07.8	+	38 46		15.6		
18 09.5	+	35 59	1279*	14.5		
18 09.8	+	35 58	1281*	15.5		double system
18 11.3	+	38 53		15.7		
18 11.4	+	33 48		14.7		
18 11.6	+	33 43		15.7		
18 14.4	+	36 03	6612	15.6		compact
18 16.7	+	36 17		14.6		
18 18.8	+	38 09		15.6		
18 19.0	+	38 07		15.2		double system, connected
18 19.1	+	38 06		15.5		
18 20.3	+	36 35		15.4		
18 24.4	+	35 23		15.6		
18 26.3	+	34 16	6640	14.2		
18 27.0	+	38 00		15.7		
18 27.3	+	33 50		15.6		
18 28.6	+	34 03		15.5		
18 28.6	+	34 18		15.3		
18 29.0	+	34 18		15.7		
18 29.5	+	34 22		15.4		



FIELD No. 201  
 $18^{\text{h}}43^{\text{m}} + 36^{\circ}00'$   
 Survey Plate No. 148

GC STARS

Nos.	R.A.	Decl.	$m_p$
	h m s	° ' "	
25443	18 34 47.1	+ 33 25 33	5.46
25466	18 35 14.7	+ 38 44 09	0.14
25507	18 36 39.7	+ 36 00 30	7.5
25847	18 48 14.0	+ 33 18 12	Var.
25889	18 49 51.0	+ 36 28 39	6.01
26059	18 56 19.2	+ 38 11 51	5.75

## CLUSTERS OF GALAXIES

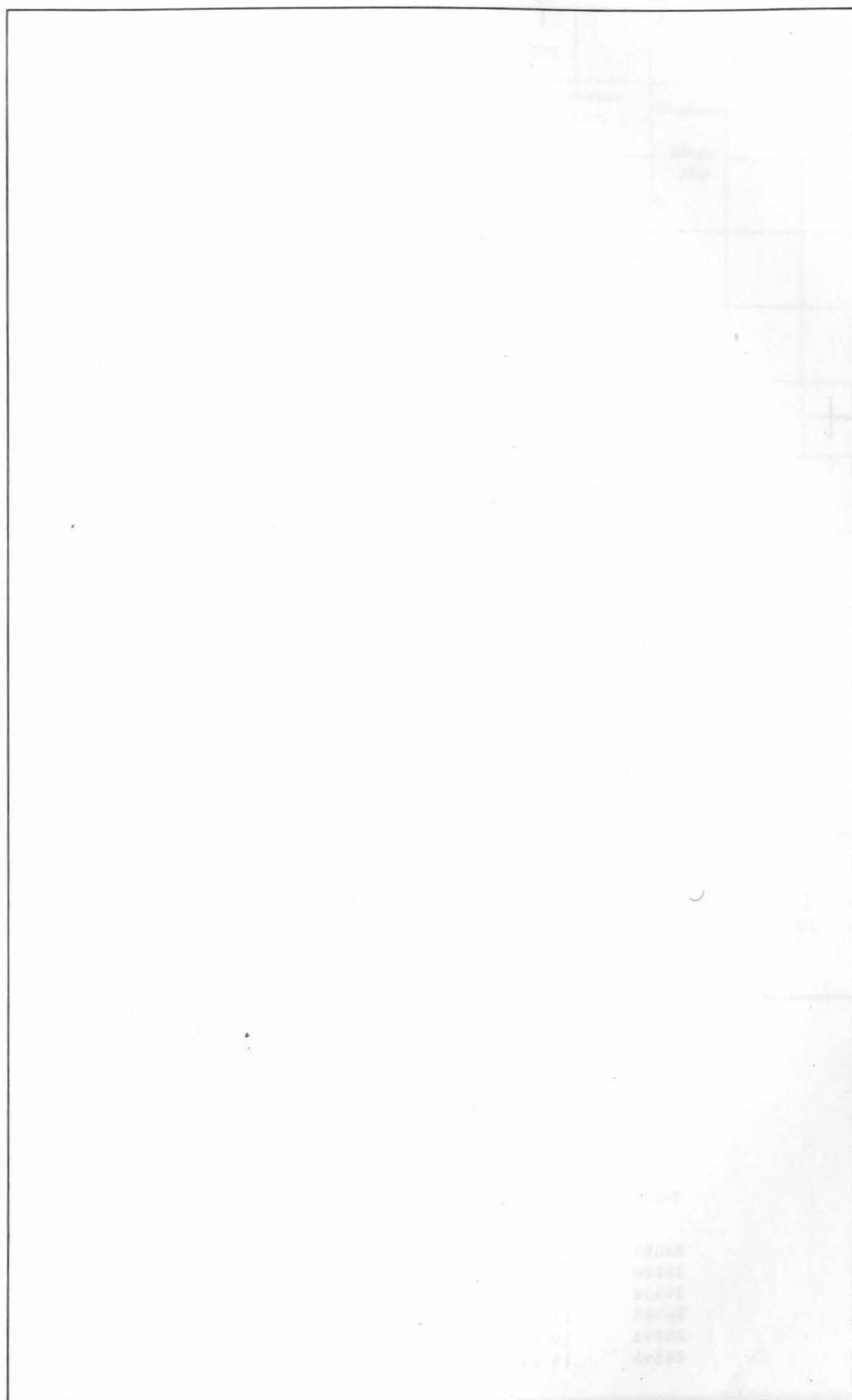
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1826.4 + 3410	medium compact	163	10.8	Near	5
1832.2 + 3348	medium compact	61	1.7	MD	6
1836.8 + 3306	medium compact	77	5.2	Near	7
1837.1 + 3633	open	165	12.5	Near	4
1845.6 + 3606	medium compact	68	4.2	MD	2
1853.5 + 3744	medium compact	147	8.0	Near	1
1854.0 + 3552	open	75	4.2	MD	3

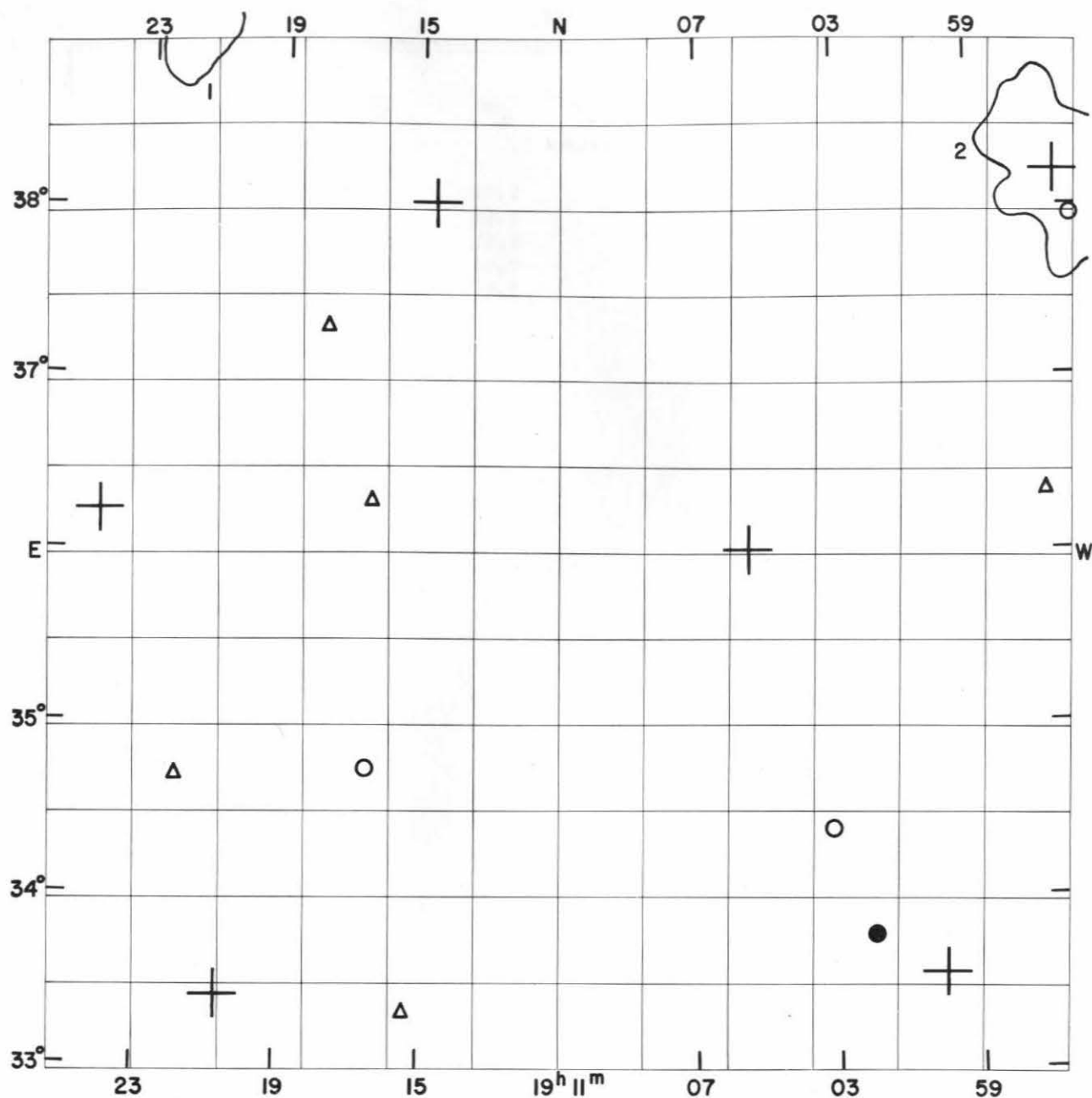
Average number of galaxies per cluster = 108.0

## GALAXIES

Position a 1950 $\delta$ h m o	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
18 28.6 + 34 03		15.5		
18 28.6 + 34 18		15.3		
18 29.0 + 34 18		15.7		
18 29.5 + 34 22		15.4		
18 29.8 + 33 53		13.9		compact, halo
18 30.4 + 37 34		14.7		
18 30.7 + 34 01		15.5		
18 31.2 + 34 00	6657	14.2		
18 32.1 + 35 32		15.3		
18 32.1 + 38 01		15.7		
18 32.1 + 38 34		15.1		
18 32.4 + 38 33		14.9		
18 33.6 + 38 24		15.4		compact
18 34.2 + 38 05		14.6		
18 34.4 + 38 06		15.7		
18 35.7 + 33 14		14.8		
18 35.8 + 36 48		14.6		
18 36.0 + 37 18		15.0		
18 36.1 + 37 24		15.0		
18 36.4 + 37 10		15.5		
18 37.0 + 36 32		15.5		
18 37.0 + 37 00		15.4		
18 37.1 + 37 54		15.1		
18 37.7 + 38 52		15.5		
18 38.3 + 37 46		15.6		
18 38.8 + 36 04		15.1		
18 38.9 + 36 14	6688	13.9		
18 39.0 + 36 06		14.6		
18 39.2 + 36 19		15.1		
18 39.5 + 35 00		15.0		
18 39.7 + 36 10		15.6		
18 39.8 + 33 44		15.4		
18 39.9 + 34 47	6692	14.3		
18 40.8 + 34 25		15.5		diffuse spiral
18 40.9 + 35 34		14.5		
18 45.8 + 33 16		15.6		
18 47.2 + 34 24		15.3		
18 48.9 + 33 53	6713	14.2		
18 50.7 + 33 46		15.0		
18 51.4 + 33 00	1296*	15.4		
18 52.0 + 34 56		15.2		

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	'				
18	52.6	+ 37	20		15.2		compact, 3 jets
18	52.7	+ 33	45		15.1		
18	55.1	+ 36	33		13.8		
18	55.9	+ 37	56		14.9		
18	56.8	+ 36	20		15.7		





FIELD No. 202

$19^{\text{h}}11^{\text{m}} + 36^{\circ}00'$

Survey Plate No. 1434

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
26059	18	56	19.2	+	38	11 51	5.75
26180	18	59	57.3	+	33	32 53	6.22
26338	19	05	31.0	+	36	01 14	5.13
26585	19	14	37.9	+	38	02 37	4.46
26743	19	20	41.0	+	33	25 17	6.30
26846	19	24	21.0	+	36	12 59	5.15

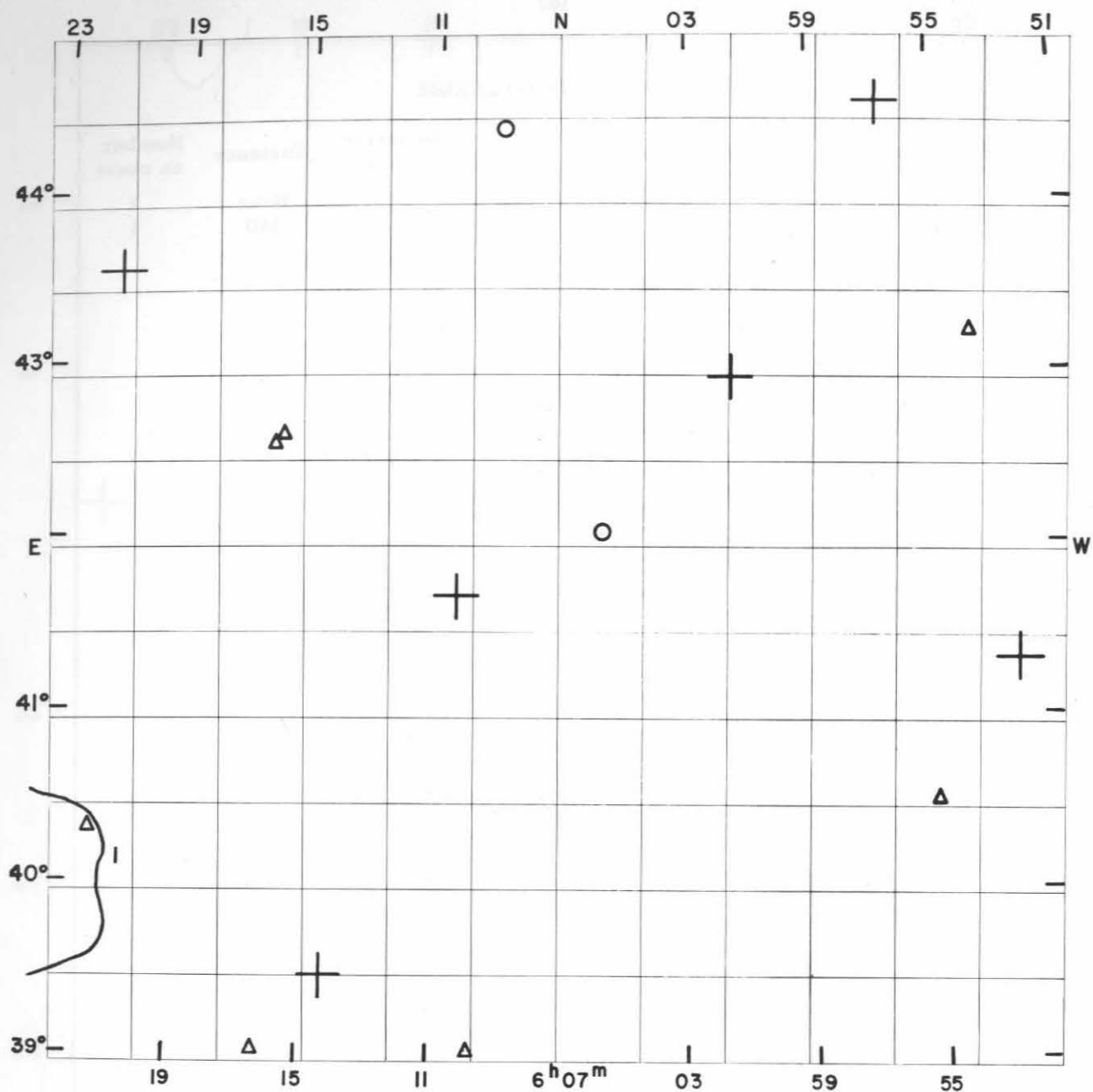
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1853.5 + 3744	medium compact	147	8.0	Near	2
1921.9 + 3901	medium compact	67	2.6	MD	1

Average number of galaxies per cluster = 107.0

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
18	55.9	+ 37 56		14.9		
18	56.8	+ 36 20		15.7		
19	02.0	+ 33 45		14.0		
19	03.1	+ 34 22		14.6		
19	15.4	+ 33 20		15.6		
19	16.4	+ 36 18		15.3		
19	16.5	+ 34 45		14.4		
19	17.8	+ 37 18		15.7		very diffuse spiral
19	22.0	+ 34 42		15.6		



FIELD No. 203

$6^h 07^m + 42^{\circ} 00'$

Survey Plate No. 669

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
7450	5	52	24.3	+	41	19 00	6.54
7563	5	56	39.5	+	44	35 27	6.44
7685	6	01	27.6	+	42	59 15	5.90
7913	6	10	10.0	+	41	42 43	6.95
8049	6	14	16.4	+	39	29 36	7.12
8242	6	21	09.7	+	43	34 35	7.22



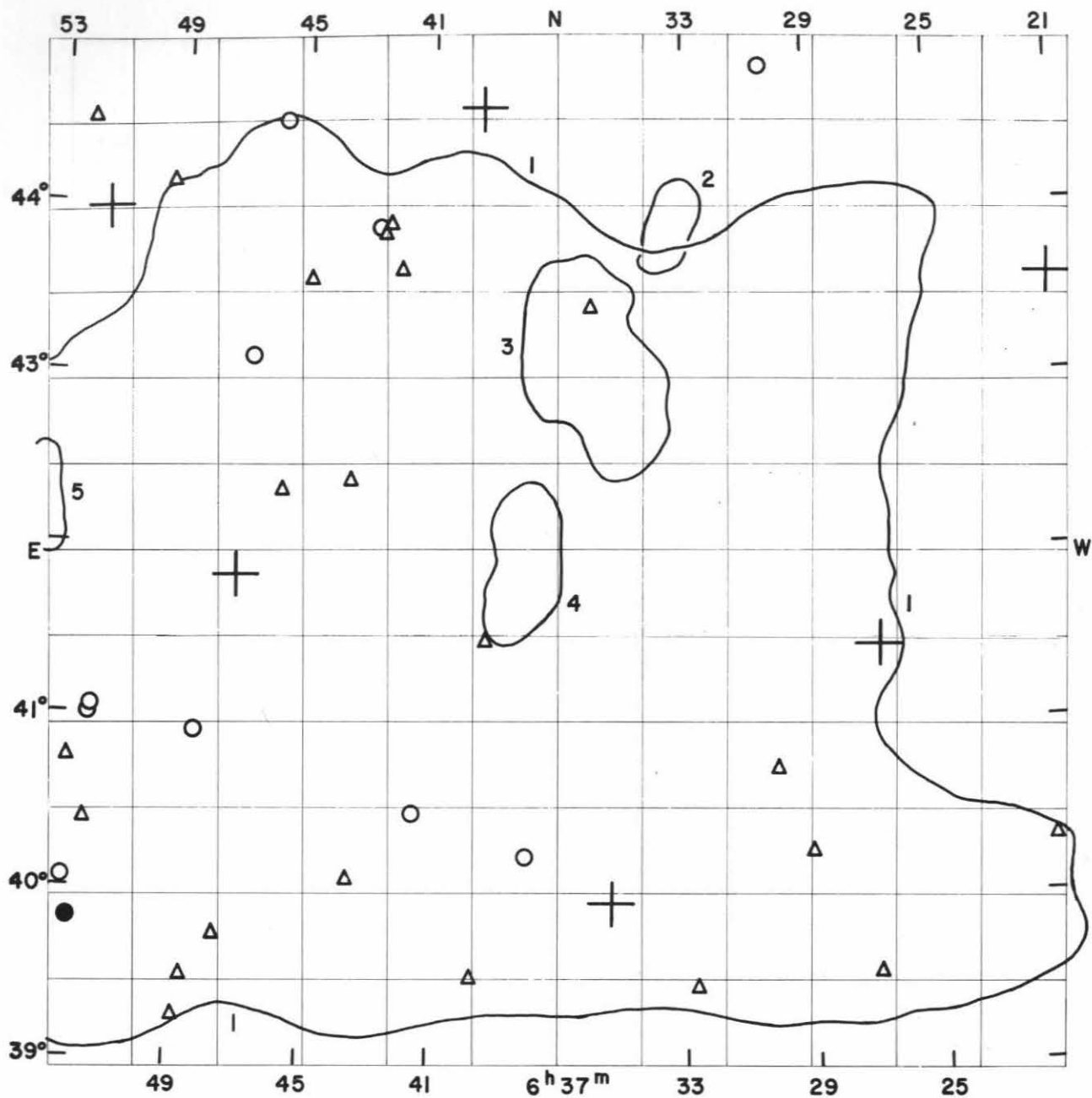
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0642.2 + 4130	open	569	32.9	Near	1

Average number of galaxies per cluster = 569.0

## GALAXIES

Position a 1950 $\delta$ h m o s				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
5	53.7	+43	14		15.5		double system, connected very compact
5	55.1	+40	31		15.6		
6	05.5	+42	05		14.6		
6	08.8	+44	27		15.0		
6	09.7	+39	04		15.4		
6	15.6	+42	39		15.6		diffuse
6	16.0	+42	35		15.7		
6	16.3	+39	03		15.7		very diffuse
6	21.6	+40	20		15.3		very compact



FIELD No. 204  
 $6^{\text{h}}37^{\text{m}} + 42^{\circ}00'$   
 Survey Plate No. 696

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
8242	6	21	09.7	+	43	34 35	7.22
8423	6	26	53.1	+	41	26 11	6.62
8655	6	35	20.3	+	39	56 51	5.28
8751	6	39	26.8	+	44	34 29	5.17
8931	6	47	14.0	+	41	50 32	5.04
9042	6	51	38.3	+	43	58 28	6.04

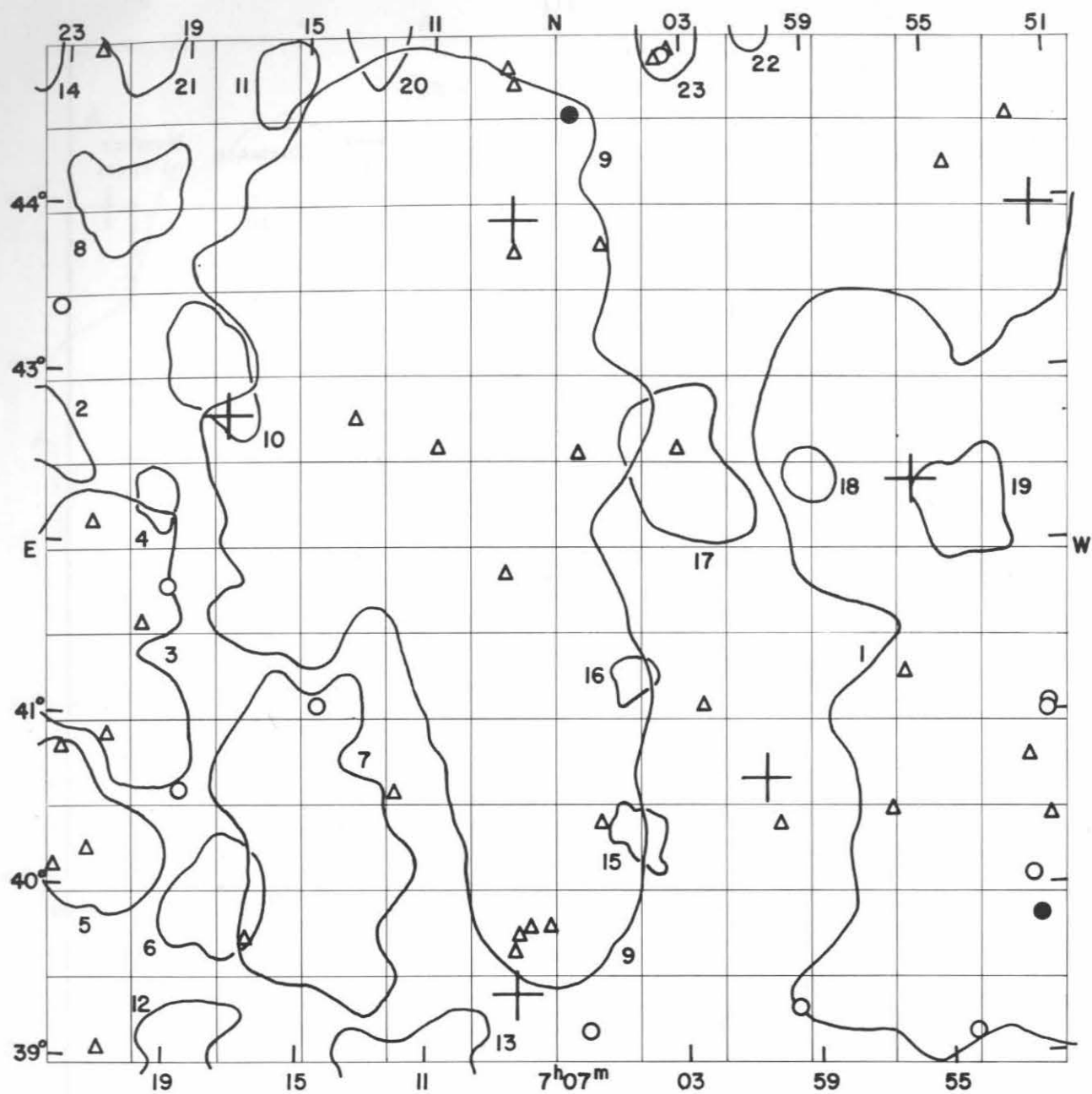
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0633.4 + 4353	medium compact	62	2.0	D	2
0635.8 + 4303	medium compact	117	5.5	MD	3
0638.0 + 4155	medium compact	88	3.5	MD	4
0642.2 + 4130	open	569	32.9	Near	1
0654.1 + 4213	medium compact	70	3.2	VD	5

Average number of galaxies per cluster = 181.2

## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	s	°				
6	21.6	+ 40	20	2242	15.3		very compact
6	27.0	+ 39	31		15.5		extremely diffuse
6	29.1	+ 40	14		15.7		
6	30.1	+ 40	43		15.3		diffuse
6	30.4	+ 44	48		14.7		
6	32.6	+ 39	27		15.2		
6	36.0	+ 43	24		15.6		
6	38.0	+ 40	13		15.0		double system
6	39.3	+ 41	28		15.6		
6	39.7	+ 39	30		15.4		compact
6	41.5	+ 40	28		14.9		
6	42.0	+ 43	37		15.5		
6	42.4	+ 43	53		15.7		
6	42.5	+ 43	50		15.3		
6	42.7	+ 43	52		14.7		compact with plume
6	43.5	+ 40	05		15.3		
6	43.6	+ 42	23		15.2		
6	45.0	+ 43	33		15.3		
6	45.8	+ 42	20		15.6		
6	45.9	+ 44	29		14.8		
6	46.8	+ 43	06		14.7		
6	47.5	+ 39	44		15.2		
6	48.3	+ 40	56		15.0		
6	48.5	+ 39	30		15.7		
6	48.7	+ 39	15		15.3		
6	49.5	+ 44	07		15.5		
6	51.6	+ 41	04		14.6		compact
6	51.7	+ 40	24		15.1		
6	51.7	+ 41	01		14.7		
6	52.0	+ 39	50		13.5		
6	52.2	+ 44	30		15.7		
6	52.3	+ 40	04		14.5		
6	52.3	+ 40	45		15.1		



FIELD No. 205

$7^{\text{h}}07^{\text{m}} + 42^{\circ}00'$

Survey Plate No. 988

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
9042	6	51	38.3	+	43	58 28	6.04
9158	6	55	47.4	+	42	23 03	6.61
9294	7	00	29.5	+	40	39 24	7.01
9490	7	08	13.2	+	39	24 15	5.07
9498	7	08	26.2	+	43	55 38	6.82
9765	7	17	31.5	+	42	45 02	6.57

## CLUSTERS OF GALAXIES

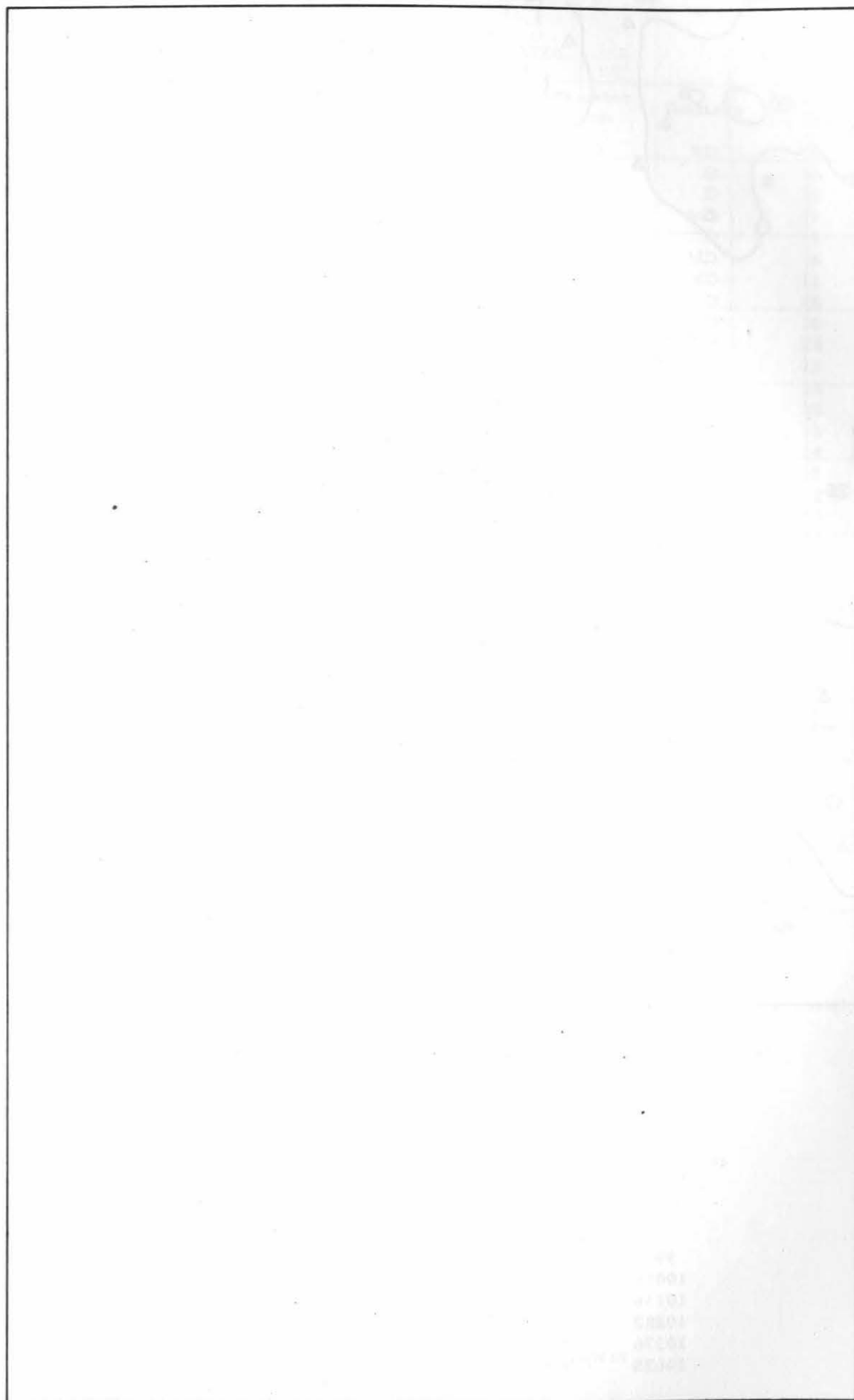
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0642.2 + 4130	open	569	32.9	Near	1
0654.1 + 4213	medium compact	70	3.2	VD	19
0659.0 + 4225	medium compact	63	1.7	D	18
0700.4 + 4801	medium compact	1273	36.4	Near	23
0702.5 + 4554	medium compact	185	6.3	D	22
0703.0 + 4228	medium compact	82	4.2	MD	17
0704.4 + 4019	medium compact	88	1.8	D	15
0704.6 + 4115	compact	58	1.5	VD	16
0710.5 + 4222	medium compact	575	18.6	Near	9
0711.2 + 3852	medium compact	119	4.3	D	13
0712.4 + 4523	medium compact	111	5.1	MD	20
0714.4 + 4015	medium compact	179	7.5	MD	7
0716.0 + 4445	medium compact	102	2.2	D	11
0717.5 + 3956	compact	150	3.5	D	6
0718.0 + 3820	medium compact	106	5.9	MD	12
0718.0 + 4301	medium compact	128	3.2	MD	10
0719.6 + 4216	compact	121	1.5	VD	4
0720.5 + 4505	medium compact	68	3.2	D	21
0721.0 + 4401	medium compact	78	3.3	D	8
0721.8 + 4019	medium compact	149	4.9	D	5
0723.1 + 4146	medium compact	345	9.3	MD	3
0723.4 + 4239	medium compact	86	2.5	D	2
0725.3 + 4520	medium compact	143	6.2	MD	14

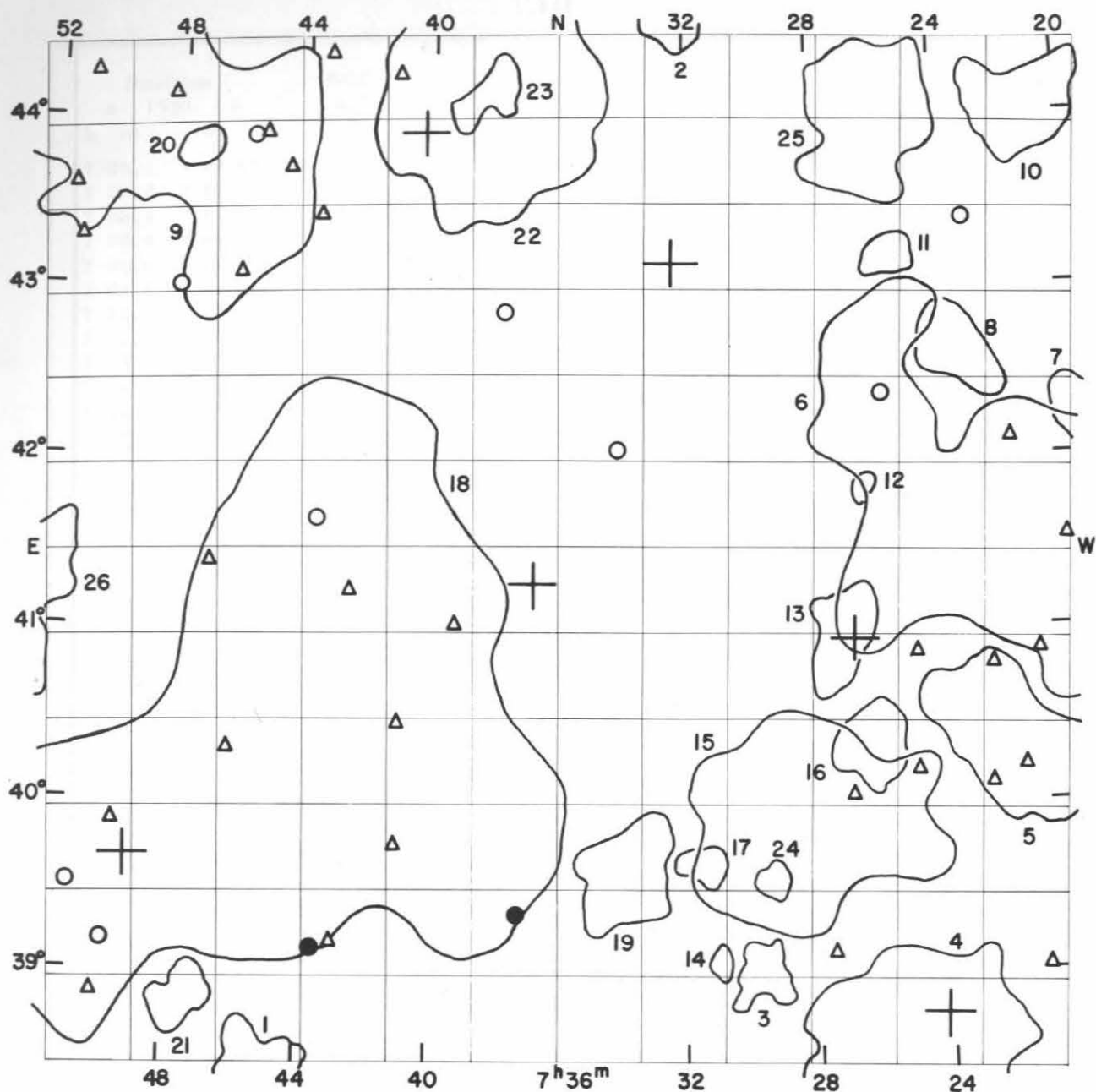
Average number of galaxies per cluster = 210.8

## GALAXIES

Position a 1950    δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
6	51.6	+41 04		14.6		compact
6	51.7	+40 24		15.1		
6	51.7	+41 01		14.7		
6	52.0	+39 50		13.5		
6	52.2	+44 30		15.7		
6	52.3	+40 04		14.5		
6	52.3	+40 45		15.1		
6	54.2	+39 09		14.2		
6	54.4	+44 13		15.4		
6	56.1	+41 15		15.4		
6	56.6	+40 27		15.4		
6	59.6	+39 18		15.0		
7	00.0	+40 23		15.3		
7	02.4	+41 05		15.1		
7	03.2	+42 35		15.6		double nucleus
7	03.3	+44 55		15.7		diffuse spiral
7	03.5	+44 53		14.7		
7	03.8	+44 52		15.5		
7	05.5	+43 46		15.2		
7	05.6	+40 25		15.5		diffuse
7	05.9	+39 10		14.8		
7	06.3	+42 33		15.7		
7	06.6	+44 32	2337	13.1		
7	07.1	+39 48		15.2		
7	07.8	+39 47		15.6		very compact

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
7	08.1	+ 39 45		15.2		double system
7	08.2	+ 39 39		15.5		
7	08.4	+ 43 44		15.5		
7	08.4	+ 44 43		15.3		system with long plume
7	08.6	+ 41 51		15.2		
7	08.6	+ 44 49		15.6		diffuse
7	10.8	+ 42 35		15.4		
7	12.0	+ 40 35		15.3		
7	13.4	+ 42 45		15.6		
7	14.5	+ 41 05		14.9		double system, bridge + plume
7	16.5	+ 39 43		15.7		diffuse
7	18.6	+ 40 34		14.9		
7	19.2	+ 41 45		15.0		
7	20.0	+ 41 31		15.3		diffuse spiral
7	21.0	+ 39 03		15.6		
7	21.0	+ 40 52		15.3		
7	21.5	+ 40 12		15.7		
7	21.7	+ 42 07		15.7		double nebula, star superposed
7	22.1	+ 44 55		15.5		
7	22.4	+ 40 47		15.6		
7	22.6	+ 40 06		15.7		extremely compact, jet
7	23.0	+ 43 23		14.3		





FIELD No. 206

$7^{\text{h}}36^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 701

# GC STARS

Nos.	R. A.			Decl.			$m_p$
	h	m	s	o	i	"	
9943	7	24	10.6	+	38	46 07	7.05
10016	7	26	46.4	+	40	57 04	6.99
10156	7	32	25.1	+	43	08 34	6.30
10282	7	36	46.8	+	41	16 47	6.73
10376	7	40	16.0	+	43	54 53	7.19
10625	7	49	17.5	+	39	40 05	7.09



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0719.6 + 4216	compact	121	1.5	VD	7
0721.0 + 4401	medium compact	78	3.3	D	10
0721.8 + 4019	medium compact	149	4.9	D	5
0723.1 + 4146	medium compact	345	9.3	MD	6
0723.4 + 4239	medium compact	86	2.5	D	8
0724.3 + 3818	medium compact	205	8.3	MD	4
0725.4 + 4310	compact	53	1.4	VD	11
0725.9 + 4400	open	73	4.6	D	25
0726.3 + 4019	medium compact	78	2.2	D	16
0726.4 + 4149	compact	54	0.7	ED	12
0727.1 + 4057	medium compact	81	2.7	D	13
0728.2 + 3951	open	187	7.1	MD	15
0729.4 + 3932	compact	64	1.0	ED	24
0729.7 + 3900	medium compact	79	1.8	VD	3
0731.0 + 3905	compact	57	0.8	ED	14
0731.5 + 3937	compact	94	1.4	ED	17
0732.3 + 4442	medium compact	55	2.8	MD	2
0733.9 + 3935	medium compact	87	3.2	D	19
0738.0 + 4431	open	139	8.2	D	22
0738.3 + 4407	medium compact	121	1.7	VD	23
0745.0 + 3825	medium compact	82	2.8	D	1
0745.5 + 4020	open	212	16.7	Near	18
0747.4 + 3850	medium compact	94	1.9	VD	21
0747.6 + 4349	medium compact	66	1.3	ED	20
0749.3 + 4402	open	193	9.7	MD	9
0753.2 + 4101	medium compact	95	4.5	Near	26

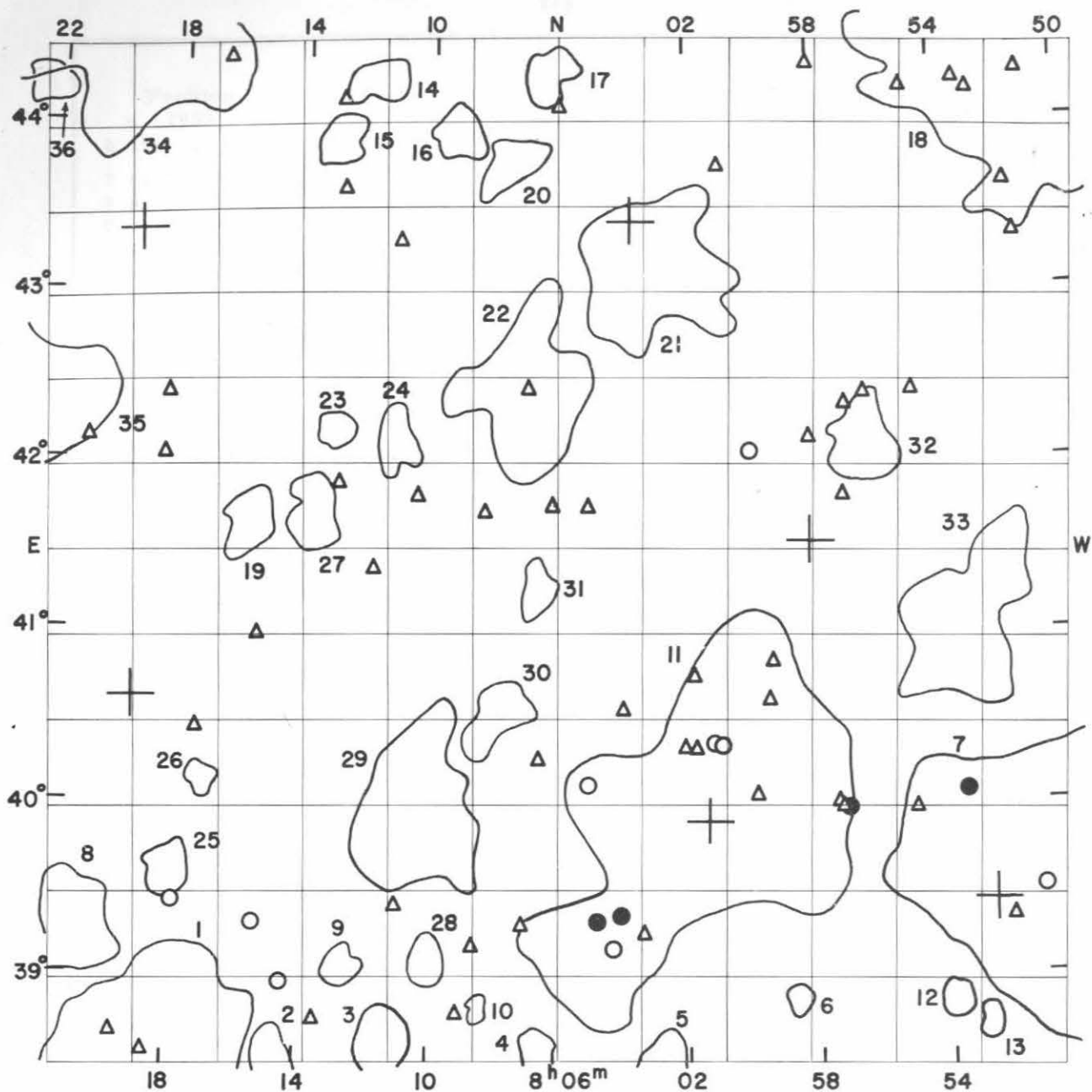
Average number of galaxies per cluster = 113.4

## GALAXIES

Position α 1950 δ			m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o			
7	20.0	+41 31	15.3		diffuse spiral
7	21.0	+39 03	15.6		
7	21.0	+40 52	15.3		
7	21.5	+40 12	15.7		
7	21.7	+42 07	15.7		double nebula, star superposed
7	22.4	+40 47	15.6		
7	22.6	+40 06	15.7		extremely compact, jet
7	23.0	+43 23	14.3		
7	24.8	+40 10	15.7		compact
7	24.8	+40 51	15.5		very diffuse
7	25.7	+42 22	14.9		
7	26.9	+40 02	15.2		double nebula, jets
7	27.6	+39 07	15.5		
7	34.0	+42 03	14.5		
7	37.3	+39 20	13.9		
7	37.7	+42 52	14.6		compact
7	39.2	+41 02	15.4		
7	40.9	+40 28	15.7		
7	41.0	+39 46	15.5		
7	41.1	+44 15	15.3		
7	42.5	+41 15	15.6		compact
7	43.0	+39 10	15.1		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "					
7 43.3		+ 44 23			15.3		
7 43.5		+ 39 08	2444+2445		13.1		peculiar multiple system
7 43.5		+ 41 40			14.8		double system
7 43.6		+ 43 25			15.5		very compact
7 44.5		+ 43 43			15.7		
7 45.4		+ 43 55			15.6		
7 45.8		+ 43 54			14.7		
7 46.1		+ 43 05			15.6		compact
7 46.2		+ 40 19			15.4		
7 46.9		+ 41 23			15.6		
7 48.0		+ 43 00			15.0		
7 48.4		+ 44 08			15.6		system with jet
7 49.7		+ 39 53			15.7		
7 49.9		+ 39 11			14.7		
7 50.1		+ 38 52			15.2		very compact
7 51.0		+ 39 30			14.8		
7 51.0		+ 44 17			15.4		compact
7 51.3		+ 43 18			15.3		
7 51.5		+ 43 37			15.5		





FIELD No. 207

$8^{\text{h}}06^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 1329

#### GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
10703	7	52	32.9	+ 39 25 12	7.14
10854	7	58	07.8	+ 41 31 39	7.20
10942	8	01	18.8	+ 39 53 01	7.17
10995	8	03	42.5	+ 43 24 21	6.24
11397	8	19	18.7	+ 40 36 18	7.00
11401	8	19	25.2	+ 43 21 01	4.43

## CLUSTERS OF GALAXIES

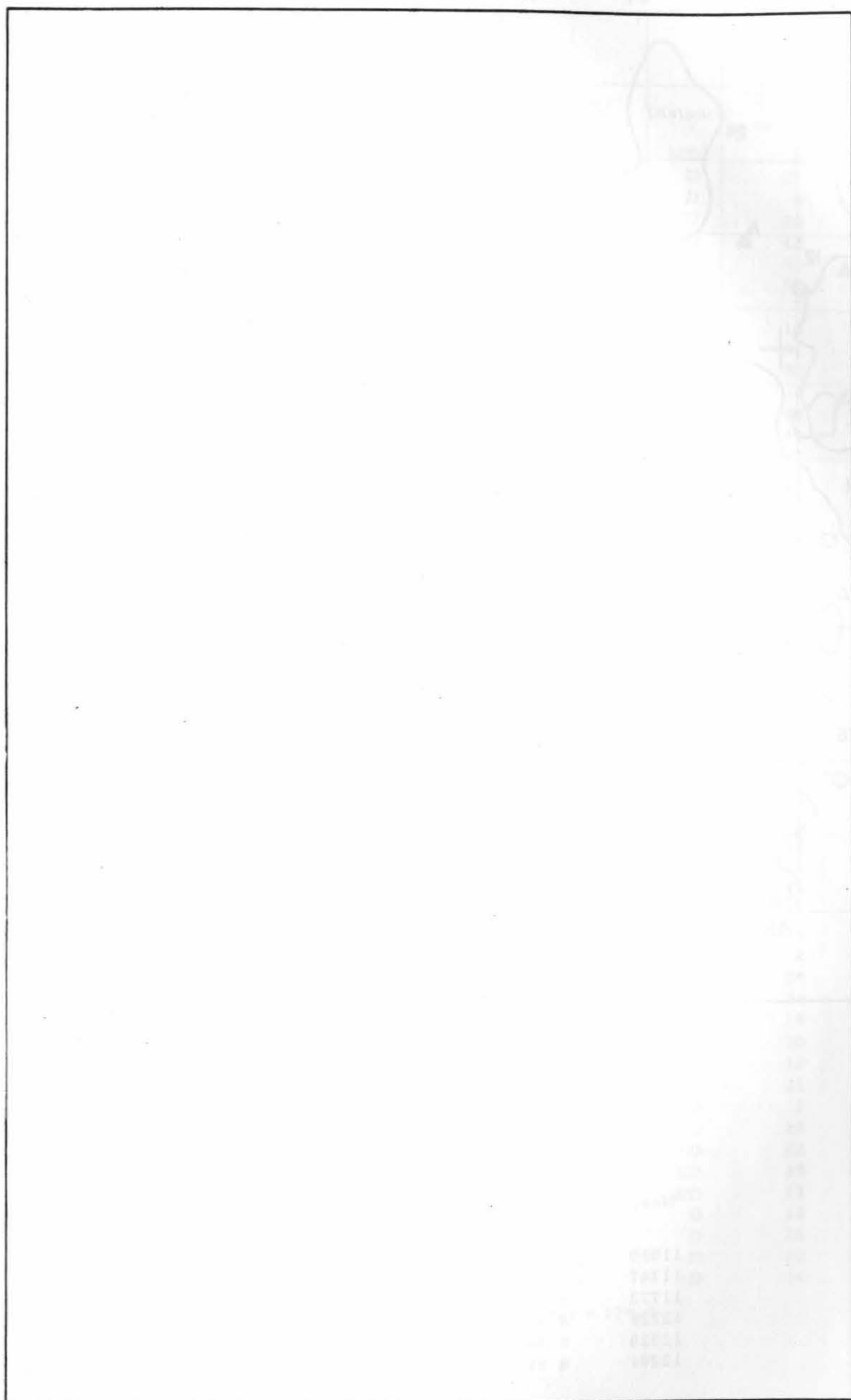
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0745.5 + 4020	open	212	16.7	Near	7
0749.3 + 4402	open	193	9.7	MD	18
0752.9 + 3842	compact	86	0.9	ED	13
0753.2 + 4101	medium compact	95	4.5	Near	33
0753.8 + 3850	medium compact	85	1.0	ED	12
0756.3 + 4205	medium compact	78	2.3	VD	32
0758.6 + 3850	compact	56	0.8	ED	6
0801.3 + 3954	open	144	9.5	Near	11
0802.8 + 3827	medium compact	111	1.7	ED	5
0803.0 + 4307	open	123	4.8	D	21
0806.3 + 4415	medium compact	85	1.6	ED	17
0806.6 + 4115	medium compact	83	1.4	ED	31
0806.7 + 3831	medium compact	76	1.3	ED	4
0806.9 + 4223	medium compact	123	4.5	MD	22
0807.5 + 4344	medium compact	51	1.7	VD	20
0807.9 + 4030	medium compact	68	2.0	VD	30
0808.5 + 3847	compact	56	0.7	ED	10
0809.1 + 4355	medium compact	88	1.6	ED	16
0810.0 + 3905	medium compact	69	1.3	ED	28
0810.2 + 3956	open	98	4.6	D	29
0811.1 + 4206	medium compact	70	1.7	VD	24
0811.2 + 3838	medium compact	108	1.8	ED	3
0811.8 + 4414	open	80	1.6	ED	14
0812.6 + 3902	compact	93	1.1	ED	9
0813.0 + 4210	compact	67	1.1	ED	23
0813.0 + 4353	medium compact	82	1.5	ED	15
0813.7 + 4141	medium compact	69	1.9	VD	27
0814.7 + 3825	medium compact	73	1.9	VD	2
0815.7 + 4137	compact	83	1.8	ED	19
0817.0 + 4007	compact	54	0.9	ED	26
0817.2 + 3802	open	374	9.0	MD	1
0817.9 + 3935	medium compact	103	1.5	VD	25
0819.9 + 4424	medium compact	176	6.1	D	34
0820.7 + 3915	medium compact	91	2.9	D	8
0822.5 + 4411	medium compact	69	1.4	VD	36
0836.3 + 4147	open	550	27.6	Near	35

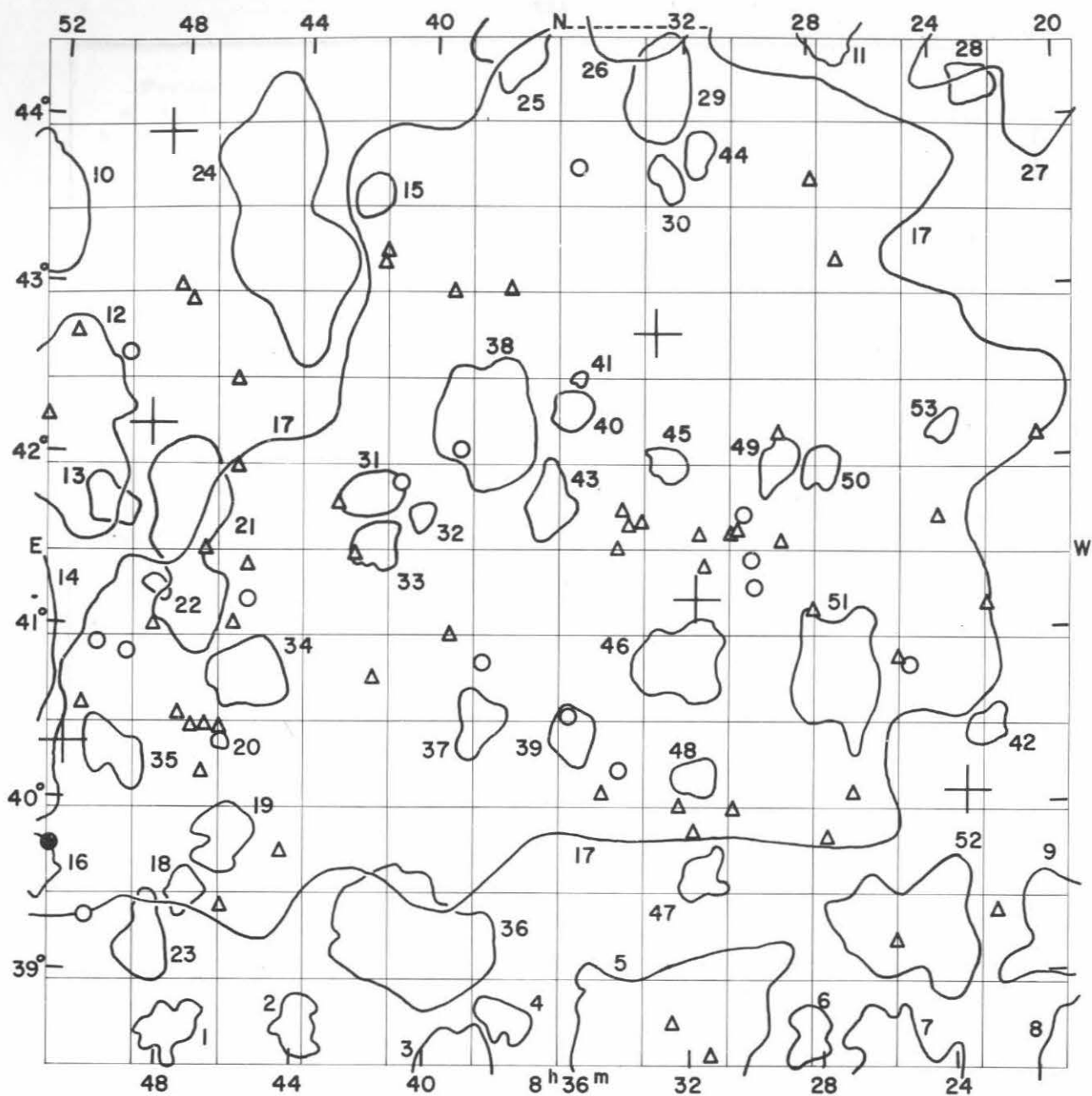
Average number of galaxies per cluster = 114.5

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
7	51.0	+39 30		14.8		
7	51.0	+44 17		15.4		compact
7	51.3	+43 18		15.3		
7	51.5	+43 37		15.5		
7	52.0	+39 19		15.5		
7	52.7	+44 10		15.7		
7	53.1	+44 14		15.7		
7	53.3	+40 04	2476	13.4		
7	54.7	+42 24		15.6		double system
7	54.8	+39 58		15.6		
7	54.8	+44 11		15.7		double system, connected

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
7	56.3	+42	23		15.4		
7	56.9	+42	19		15.5		
7	57.0	+39	58	2493	13.1		
7	57.0	+41	48		15.4		double nucleus
7	57.1	+39	59	2495	15.6		
7	57.2	+40	00		15.6		
7	57.9	+44	19		15.5		
7	58.1	+42	08		15.3		very compact
7	59.3	+40	49		15.2		
7	59.4	+40	36		15.4		
7	59.8	+40	03		15.4		
7	59.9	+42	03		14.7		
8	00.8	+43	43		15.7		
8	00.9	+40	20		15.0		compact
8	01.1	+40	21		14.6		
8	01.7	+40	19		15.1		
8	01.8	+40	44		15.3		
8	02.0	+40	19		15.6		
8	03.3	+39	14		15.5		
8	03.9	+40	33		15.2		very diffuse spir
8	04.0	+39	20		13.5		
8	04.2	+39	09		14.4		
8	04.7	+39	18	2524	13.7		
8	05.0	+40	07		14.9		
8	05.0	+41	44		15.7		
8	05.9	+44	05		15.5		
8	06.1	+41	45		15.5		
8	06.6	+40	15		15.4		diffuse spiral
8	07.0	+42	25		15.6		
8	07.1	+39	17		15.5		
8	08.3	+41	43		15.3		
8	08.6	+39	10		15.4		
8	09.1	+38	46		15.7		diffuse spiral
8	10.4	+41	48		15.2		
8	11.0	+39	25		15.2		
8	11.0	+43	17		15.1		compact
8	11.8	+41	22		15.3		
8	12.8	+43	36		15.5		compact
8	12.9	+41	52		15.7		
8	12.9	+44	07		15.6		
8	13.5	+38	44		15.6		
8	14.5	+38	57		14.9		
8	15.3	+39	18		15.0		compact
8	15.4	+41	00		15.7		double system
8	16.7	+44	23		15.2		compact
8	17.2	+40	27		15.3		
8	17.8	+39	26		14.8		double system
8	18.3	+42	23		15.7		double system
8	18.4	+42	01		15.4		double system, faint bridges
8	18.6	+38	32		15.7		compact
8	19.5	+38	39		15.5		
8	20.9	+42	07		15.7		eruptive galaxy





FIELD No. 208

$8^{\text{h}}36^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 707

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
11510	8	23	28.2	+	40	03 26	7.22
11747	8	31	43.7	+	41	11 48	7.58
11772	8	32	53.8	+	42	45 13	6.98
12221	8	48	36.0	+	43	54 51	5.24
12228	8	48	52.0	+	42	11 31	6.14
12291	8	51	15.1	+	40	19 34	7.52



## CLUSTERS OF GALAXIES

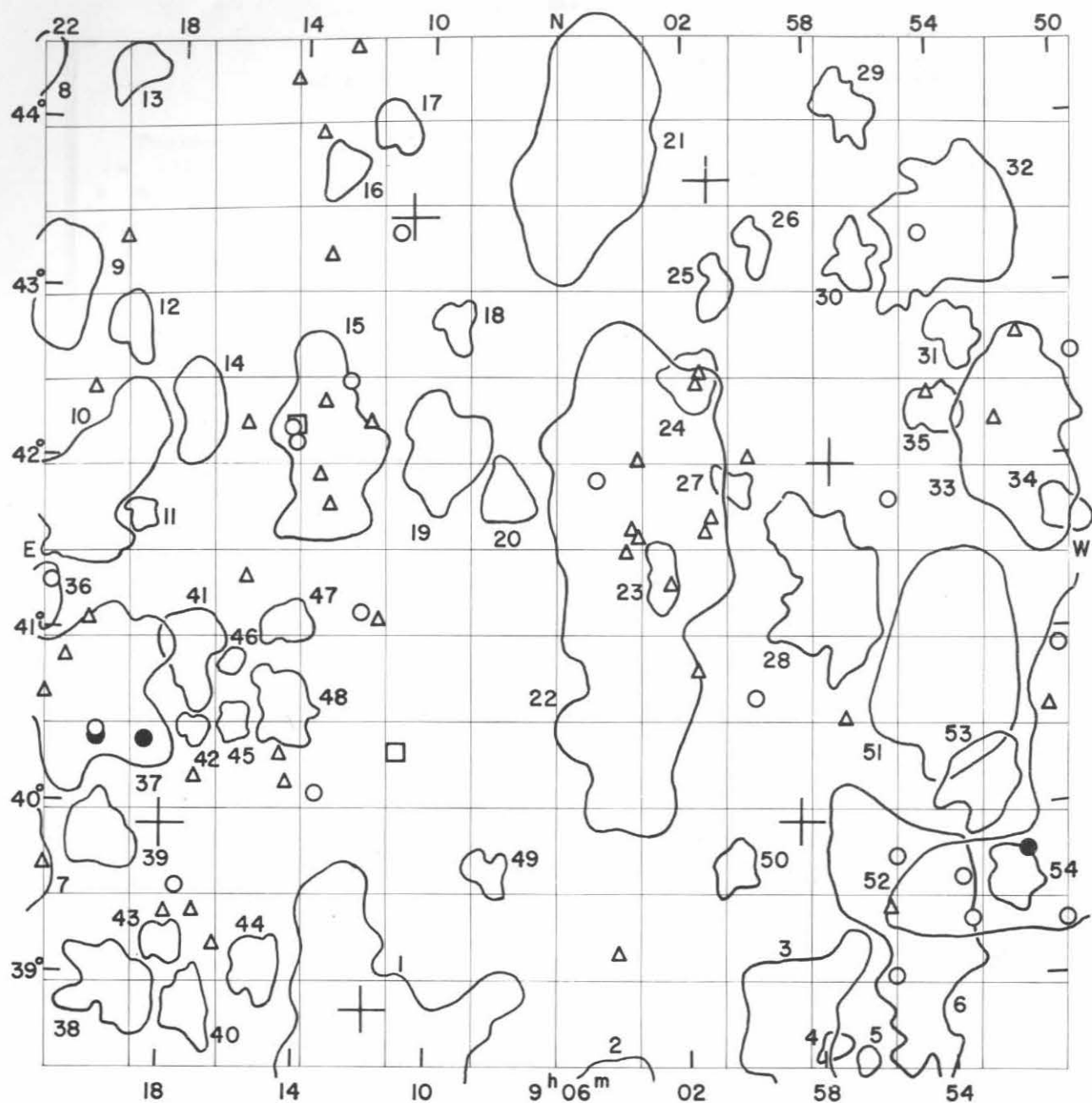
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0817.2 + 3802	open	374	9.0	MD	8
0819.9 + 4424	medium compact	176	6.1	D	27
0820.7 + 3915	medium compact	91	2.9	D	9
0822.5 + 4411	medium compact	69	1.4	VD	28
0822.8 + 4027	compact	128	1.2	ED	42
0823.9 + 4211	compact	86	0.9	ED	53
0825.1 + 3916	medium compact	114	4.1	MD	52
0825.6 + 3826	compact	188	3.5	ED	7
0827.3 + 4432	medium compact	81	2.0	VD	11
0827.4 + 4045	medium compact	92	3.5	D	51
0827.8 + 4158	medium compact	87	1.3	ED	50
0828.3 + 3840	compact	55	1.5	VD	6
0829.1 + 4200	medium compact	81	1.4	VD	49
0831.6 + 4347	medium compact	79	1.2	ED	44
0831.7 + 3935	medium compact	83	1.4	VD	47
0831.8 + 4010	medium compact	90	1.2	ED	48
0832.2 + 3845	medium compact	130	5.5	Near	5
0832.2 + 4050	medium compact	77	2.3	VD	46
0832.5 + 4340	medium compact	79	1.3	ED	30
0832.6 + 4200	open	67	1.1	ED	45
0832.7 + 4410	medium compact	92	2.8	VD	29
0833.1 + 4452	medium compact	117	4.7	D	26
0835.3 + 4230	compact	36	0.4	ED	41
0835.6 + 4024	medium compact	96	1.5	ED	39
0835.6 + 4218	compact	91	1.2	ED	40
0836.2 + 4145	open	78	1.8	VD	43
0836.3 + 4147	open	550	27.6	Near	17
0837.4 + 4431	open	94	2.8	D	25
0837.5 + 3845	compact	126	1.4	ED	4
0838.3 + 4214	medium compact	84	3.6	VD	38
0838.4 + 4030	medium compact	86	1.6	VD	37
0839.0 + 3824	compact	240	2.9	VD	3
0840.3 + 4142	compact	105	0.8	ED	32
0840.4 + 3914	medium compact	130	4.5	D	36
0841.7 + 4131	medium compact	102	1.5	ED	33
0841.9 + 4149	medium compact	60	1.7	ED	31
0842.0 + 4332	medium compact	79	1.3	ED	15
0843.8 + 3842	medium compact	70	1.6	VD	2
0844.9 + 4322	medium compact	134	5.5	D	24
0845.6 + 4045	medium compact	147	2.1	VD	34
0846.2 + 3948	medium compact	108	2.0	VD	19
0846.4 + 4021	compact	47	0.4	ED	20
0847.4 + 3928	medium compact	100	1.3	VD	18
0847.6 + 4132	open	115	4.0	VD	21
0847.7 + 3839	medium compact	149	1.7	ED	1
0848.5 + 3909	medium compact	143	2.0	ED	23
0848.5 + 4114	compact	44	0.6	ED	22
0849.7 + 4015	medium compact	121	1.9	ED	35
0850.0 + 4143	compact	105	1.5	ED	13
0851.5 + 4207	compact	228	4.6	D	12
0852.0 + 3935	medium compact	59	1.7	D	16
0853.4 + 4321	medium compact	192	4.5	D	10
0853.8 + 4048	open	154	5.6	D	14

Average number of galaxies per cluster = 119.0

## GALAXIES

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
a 1950 $\delta$							
h	m	o	'				
8	20.9	+ 42	07		15.7		eruptive galaxy
8	22.6	+ 39	21		15.5		
8	22.7	+ 41	09		15.4		
8	24.1	+ 41	40		15.4		diffuse spiral
8	25.1	+ 40	48		15.0		
8	25.5	+ 40	50		15.5		
8	25.7	+ 39	12		15.6		
8	26.9	+ 40	03		15.6		
8	27.2	+ 43	09		15.5		
8	27.7	+ 39	47		15.5		
8	27.8	+ 43	38		15.7		
8	28.1	+ 41	07		15.7		diffuse with absorption
8	29.0	+ 41	32		15.2		
8	29.1	+ 42	10		15.3		
8	29.8	+ 41	16		14.9		
8	30.0	+ 41	26		15.0		
8	30.2	+ 41	42		14.7		
8	30.4	+ 41	36		15.6		
8	30.6	+ 39	59		15.4		diffuse spiral
8	30.7	+ 41	35		15.7		
8	31.4	+ 38	32		15.2		
8	31.5	+ 41	23		15.5		diffuse
8	31.6	+ 41	35		15.6		
8	31.8	+ 39	51		15.6		
8	32.3	+ 40	00		15.3		
8	32.5	+ 38	44		15.5		double system
8	33.3	+ 41	39		15.6		
8	33.7	+ 41	38		15.1		
8	34.0	+ 40	13		14.8		
8	34.0	+ 41	44		15.4		
8	34.1	+ 41	30		15.5		
8	34.6	+ 40	05		15.7		
8	35.3	+ 43	43		15.0		
8	35.6	+ 40	32		15.0		compact
8	37.5	+ 43	01		15.5		
8	38.3	+ 40	50		14.9		double system in halo
8	39.0	+ 42	05		15.0		
8	39.3	+ 41	00		15.5		
8	39.3	+ 43	00		15.2		
8	40.9	+ 41	55		14.1		system with jet
8	41.4	+ 43	14		15.6		
8	41.5	+ 43	10		15.4		
8	41.7	+ 40	45		15.2		
8	42.3	+ 41	28		15.1		
8	42.9	+ 41	46		15.1		
8	44.5	+ 39	43		15.7		compact
8	45.7	+ 41	12		14.9		compact
8	45.7	+ 41	23		15.4		compact
8	46.1	+ 41	03		15.7		
8	46.1	+ 41	58		15.6		
8	46.2	+ 39	24		15.3		diffuse spiral
8	46.2	+ 42	28		15.7		
8	46.4	+ 40	26		15.5		diffuse
8	46.9	+ 40	27		15.1		compact
8	47.0	+ 40	11		15.7		compact
8	47.0	+ 41	29		15.3		very diffuse spiral

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	'				
8	47.3	+ 40	27		15.4		
8	47.6	+ 42	55		15.4		
8	47.7	+ 40	31		15.7		
8	48.0	+ 43	00		15.7		
8	48.6	+ 41	02		15.2		system with long plumes
8	49.4	+ 40	53		15.0		
8	49.6	+ 42	36		14.1		
8	50.3	+ 40	55		14.9		
8	50.4	+ 39	20		14.6		
8	50.7	+ 40	33		15.6		
8	51.3	+ 42	43		15.4		
8	51.5	+ 39	44	2691	13.9		
8	52.1	+ 42	13		15.3		



FIELD No. 209

$9^{\text{h}}06^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 721

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
12434	8	57	24.1	+	41	58 56	4.09
12461	8	58	27.8	+	39	54 41	6.21
12518	9	01	09.1	+	43	38 29	8.0
12716	9	10	32.5	+	43	25 31	5.30
12747	9	11	49.2	+	38	48 58	6.75
12884	9	18	06.1	+	39	52 47	7.12

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0836.3 + 4147	open	550	27.6	Near	52
0850.0 + 4143	compact	105	1.5	ED	34
0851.5 + 4207	compact	228	4.6	D	33
0852.0 + 3935	medium compact	59	1.7	D	54
0852.9 + 4009	medium compact	69	2.4	MD	53
0853.3 + 4245	compact	125	1.6	ED	31
0853.4 + 4321	medium compact	192	4.5	D	32
0853.8 + 4048	open	154	5.6	D	51
0854.0 + 4217	medium compact	131	1.6	ED	35
0855.1 + 3918	medium compact	375	5.5	D	6
0856.5 + 4310	open	70	1.7	ED	30
0856.7 + 3832	medium compact	58	0.8	ED	5
0856.7 + 4404	medium compact	135	1.9	ED	29
0857.4 + 4116	medium compact	112	4.0	VD	28
0857.6 + 3837	medium compact	60	0.9	ED	4
0858.6 + 3836	medium compact	149	4.6	MD	3
0859.6 + 4315	medium compact	84	1.3	ED	26
0900.4 + 4152	medium compact	82	1.2	ED	27
0900.6 + 3940	compact	106	1.5	VD	50
0901.0 + 4300	medium compact	102	1.4	ED	25
0901.8 + 4229	medium compact	99	1.9	ED	24
0902.7 + 4120	medium compact	103	1.4	ED	23
0903.5 + 4122	open	210	9.1	VD	22
0903.9 + 3716	open	147	9.4	Near	2
0905.0 + 4351	medium compact	153	5.9	MD	21
0907.6 + 4149	medium compact	90	1.8	D	20
0908.1 + 3939	compact	80	1.2	ED	49
0909.1 + 4248	compact	151	1.3	ED	18
0909.5 + 4205	medium compact	120	3.0	VD	19
0911.2 + 3846	open	221	6.1	MD	1
0911.2 + 4359	compact	112	1.5	ED	17
0912.9 + 4343	medium compact	115	1.5	ED	16
0913.1 + 4205	open	103	4.4	D	15
0914.3 + 4035	medium compact	89	2.1	D	48
0914.4 + 4104	medium compact	71	1.5	VD	47
0915.1 + 3903	medium compact	103	1.8	VD	44
0915.9 + 4030	compact	103	1.1	ED	45
0916.0 + 4050	compact	61	0.8	ED	46
0917.1 + 4026	open	60	0.9	ED	42
0917.1 + 4218	medium compact	72	2.3	VD	14
0917.2 + 3848	medium compact	147	2.0	ED	40
0917.2 + 4053	compact	143	2.3	MD	41
0918.0 + 3912	medium compact	111	1.2	ED	43
0919.0 + 4140	open	57	0.9	ED	11
0919.5 + 3856	medium compact	70	2.7	VD	38
0919.6 + 4246	open	116	1.7	ED	12
0919.8 + 4419	medium compact	151	1.7	ED	13
0920.0 + 3948	medium compact	60	2.2	VD	39
0920.4 + 4037	open	108	5.2	Near	37
0920.5 + 4150	medium compact	164	4.6	VD	10
0921.8 + 4302	compact	228	3.0	VD	9
0922.0 + 4111	medium compact	91	1.5	VD	36
0923.2 + 3934	open	98	4.1	D	7
0923.9 + 4410	medium compact	192	2.7	VD	8

Average number of galaxies per cluster = 128.6

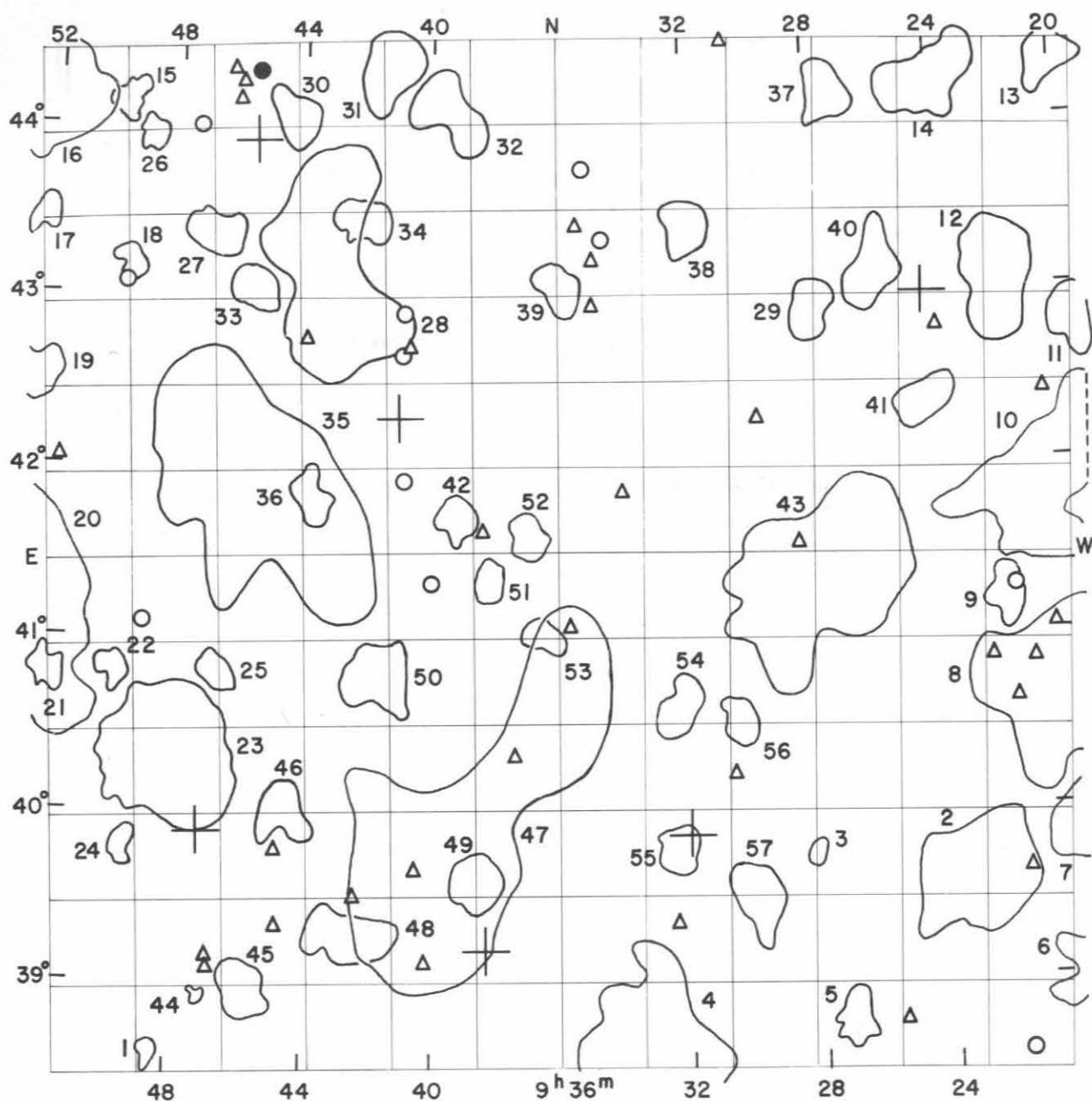
## GALAXIES

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ 1950 $\delta$							
h	m	o	'				
8	49.6	+42	36		14.1		
8	50.3	+40	55		14.9		
8	50.4	+39	20		14.6		
8	50.7	+40	33		15.6		
8	51.3	+42	43		15.4		
8	51.5	+39	44	2691	13.9		
8	52.1	+42	13		15.3		
8	53.3	+39	20		14.9		
8	53.6	+39	34	2424*	14.4		
8	54.2	+42	22		15.7		
8	54.4	+43	18		14.5		
8	55.6	+39	42		14.7		double nucleus, faint jet
8	55.6	+41	46		14.6		
8	55.7	+39	00		15.0		
8	55.8	+39	24		15.5		
8	57.0	+40	30		15.5		
8	59.8	+40	38		14.9		compact
8	59.9	+42	01		15.7		
9	01.1	+41	41		15.6		very compact
9	01.3	+41	36		15.6		
9	01.5	+42	31		15.5		
9	01.6	+40	48		15.6		
9	01.6	+42	27		15.6		
9	02.4	+41	17		15.7		extremely compact
9	03.4	+41	35		15.4		
9	03.4	+42	00		15.6		double system
9	03.6	+41	37		15.1		
9	03.8	+41	29		15.5		
9	04.0	+39	09		15.2		
9	04.7	+41	55	2755	14.2		
9	10.9	+40	20	2782	12.3	+2517	$m_H = 12.4$ SBp
9	10.9	+43	20		14.8		
9	11.5	+41	05		15.2		
9	11.7	+42	14		15.4		
9	12.0	+41	07	2785	14.9		
9	12.4	+44	26		15.4		very compact
9	12.5	+42	28		14.8		
9	13.1	+41	45		15.7		compact
9	13.1	+43	12		15.3		double system, disrupted
9	13.2	+42	20		15.5		compact
9	13.4	+40	05		15.0		
9	13.4	+41	55		15.3		compact
9	13.5	+43	55		15.3		triple system
9	14.1	+42	07		15.0		
9	14.1	+42	12	2798	12.9	+1708	$m_H = 12.9$ E
9	14.2	+42	12	2799	14.4		
9	14.3	+40	08		15.4		
9	14.4	+44	14		15.5		diffuse
9	14.5	+40	18		15.7		
9	15.6	+41	19		15.4		double system
9	15.7	+42	13		15.6		compact
9	16.4	+39	11		15.7		
9	17.0	+39	22		15.1		
9	17.0	+40	10		15.7		
9	17.5	+39	31	2838	14.7		compact
9	17.8	+39	22		15.5		diffuse

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
9	18.6	+ 40 22	2844	13.6		$m_H = 13.0$
9	19.7	+ 43 17		15.7		
9	20.0	+ 40 23	2852	14.0		compact
9	20.1	+ 40 25	2853	14.6		
9	20.5	+ 41 03		15.5		
9	20.5	+ 42 24		15.6		
9	21.2	+ 40 50		15.4		
9	21.6	+ 39 37		15.7		compact
9	21.7	+ 41 16	2860	14.8		
9	21.8	+ 40 37		15.2		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2782	-	-	12.74	Sa	12.5	Sa	-	-
2798	-	-	12.97	SBa	13.0	SBa	-	-



FIELD No. 210

$9^{\text{h}}36^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 661

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
13024	9	24	19.5	+	42	58 58	7.37
13221	9	31	57.1	+	39	50 40	4.99
13361	9	38	16.8	+	39	10 47	6.96
13413	9	40	59.1	+	42	16 54	6.82
13503	9	45	35.9	+	43	53 56	7.76
13533	9	47	10.0	+	39	51 56	6.76



## CLUSTERS OF GALAXIES

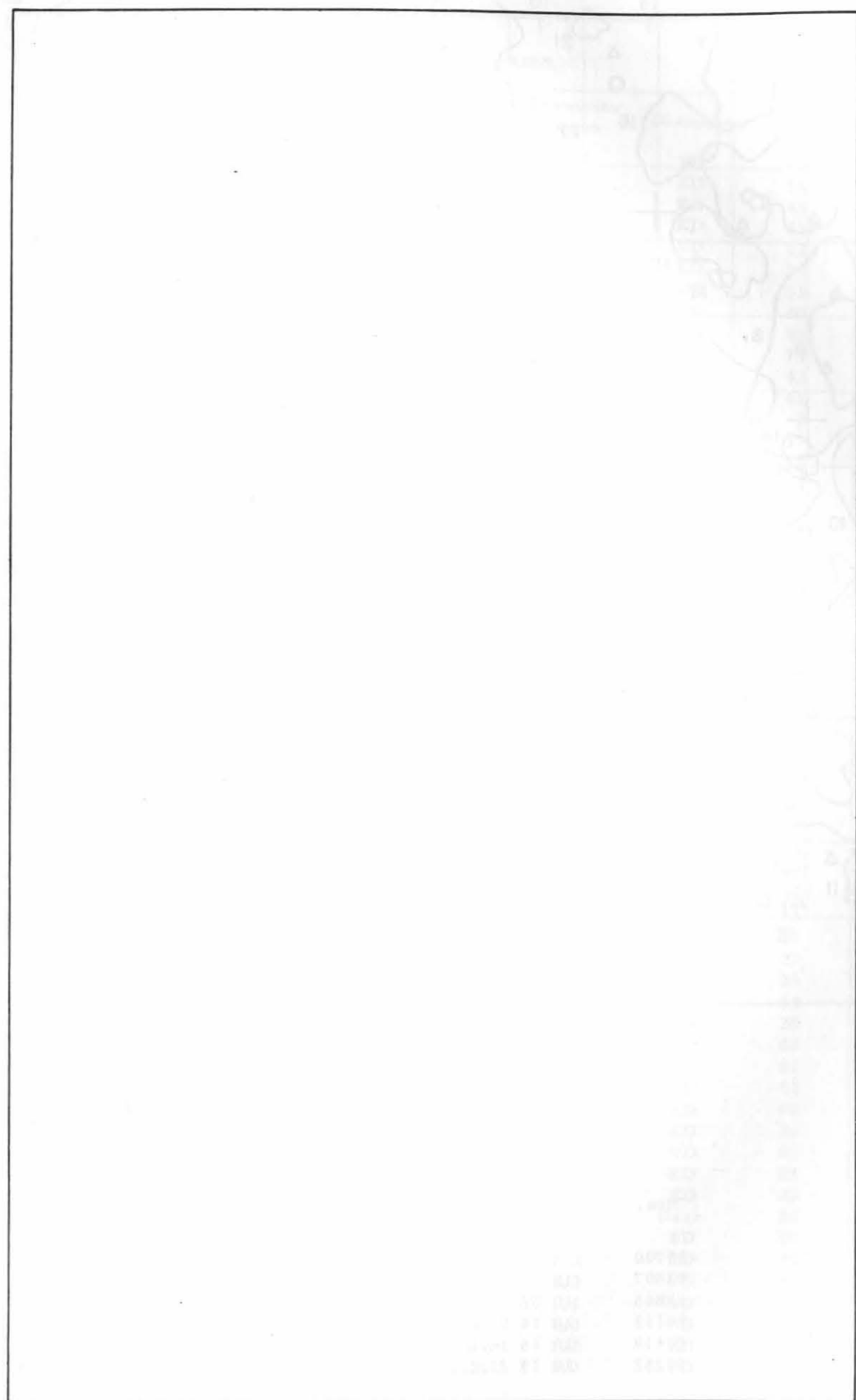
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0919.5 + 3856	medium compact	70	2.7	VD	6
0919.6 + 4246	open	116	1.7	ED	11
0919.8 + 4419	medium compact	151	1.7	ED	13
0920.0 + 3948	medium compact	60	2.2	VD	7
0920.4 + 4037	open	108	5.2	Near	8
0920.5 + 4150	medium compact	164	4.6	VD	10
0921.8 + 4302	compact	228	3.0	VD	12
0922.0 + 4111	medium compact	91	1.5	VD	9
0923.2 + 3934	open	98	4.1	D	2
0923.9 + 4410	medium compact	192	2.7	VD	14
0924.3 + 4220	medium compact	92	1.6	ED	41
0925.8 + 4305	open	112	2.0	ED	40
0927.1 + 3845	medium compact	101	1.4	VD	5
0927.1 + 4408	medium compact	67	1.7	ED	37
0927.9 + 4119	open	116	5.6	D	43
0927.9 + 4252	medium compact	79	1.6	ED	29
0928.1 + 3943	compact	52	0.7	ED	3
0930.0 + 3927	medium compact	93	1.9	ED	57
0930.4 + 4030	medium compact	62	1.3	ED	56
0931.9 + 4321	medium compact	85	1.6	VD	38
0932.3 + 4034	compact	75	1.6	ED	54
0932.4 + 3945	compact	93	1.4	ED	55
0932.9 + 3825	open	207	5.7	D	4
0935.9 + 4301	medium compact	92	1.5	ED	39
0936.4 + 4100	compact	94	1.2	ED	53
0936.9 + 4135	open	67	1.3	ED	52
0938.1 + 4119	compact	48	1.2	ED	51
0938.6 + 3934	compact	104	1.7	ED	49
0938.7 + 3957	open	110	7.8	Near	47
0939.1 + 4142	medium compact	69	1.3	ED	42
0939.4 + 4403	medium compact	123	2.3	VD	32
0941.3 + 4419	compact	182	2.1	VD	31
0941.6 + 4046	medium compact	138	2.1	ED	50
0942.1 + 4325	compact	98	1.5	VD	34
0942.5 + 3915	medium compact	95	2.3	VD	48
0943.2 + 4307	medium compact	161	5.1	MD	28
0943.8 + 4148	medium compact	76	1.4	ED	36
0944.1 + 4400	medium compact	124	1.6	ED	30
0944.5 + 3959	open	90	1.7	ED	46
0945.4 + 4151	medium compact	107	7.1	MD	35
0945.6 + 3856	open	58	1.8	VD	45
0945.6 + 4301	medium compact	90	1.4	ED	33
0946.6 + 4047	compact	73	1.2	ED	25
0946.9 + 4320	medium compact	103	1.6	ED	27
0947.1 + 3853	compact	52	0.3	ED	44
0948.0 + 4017	open	243	4.3	D	23
0948.5 + 3834	compact	60	0.6	ED	1
0949.0 + 4356	medium compact	67	1.0	ED	26
0949.5 + 3947	medium compact	58	0.8	ED	24
0949.6 + 4311	medium compact	71	1.0	VD	18
0949.8 + 4048	compact	91	1.1	ED	22
0949.9 + 4409	compact	77	1.1	ED	15
0951.9 + 4047	medium compact	98	1.2	ED	21
0952.4 + 4328	medium compact	64	1.0	ED	17
0952.5 + 4232	medium compact	96	1.6	ED	19
0952.7 + 4413	open	119	4.1	MD	16

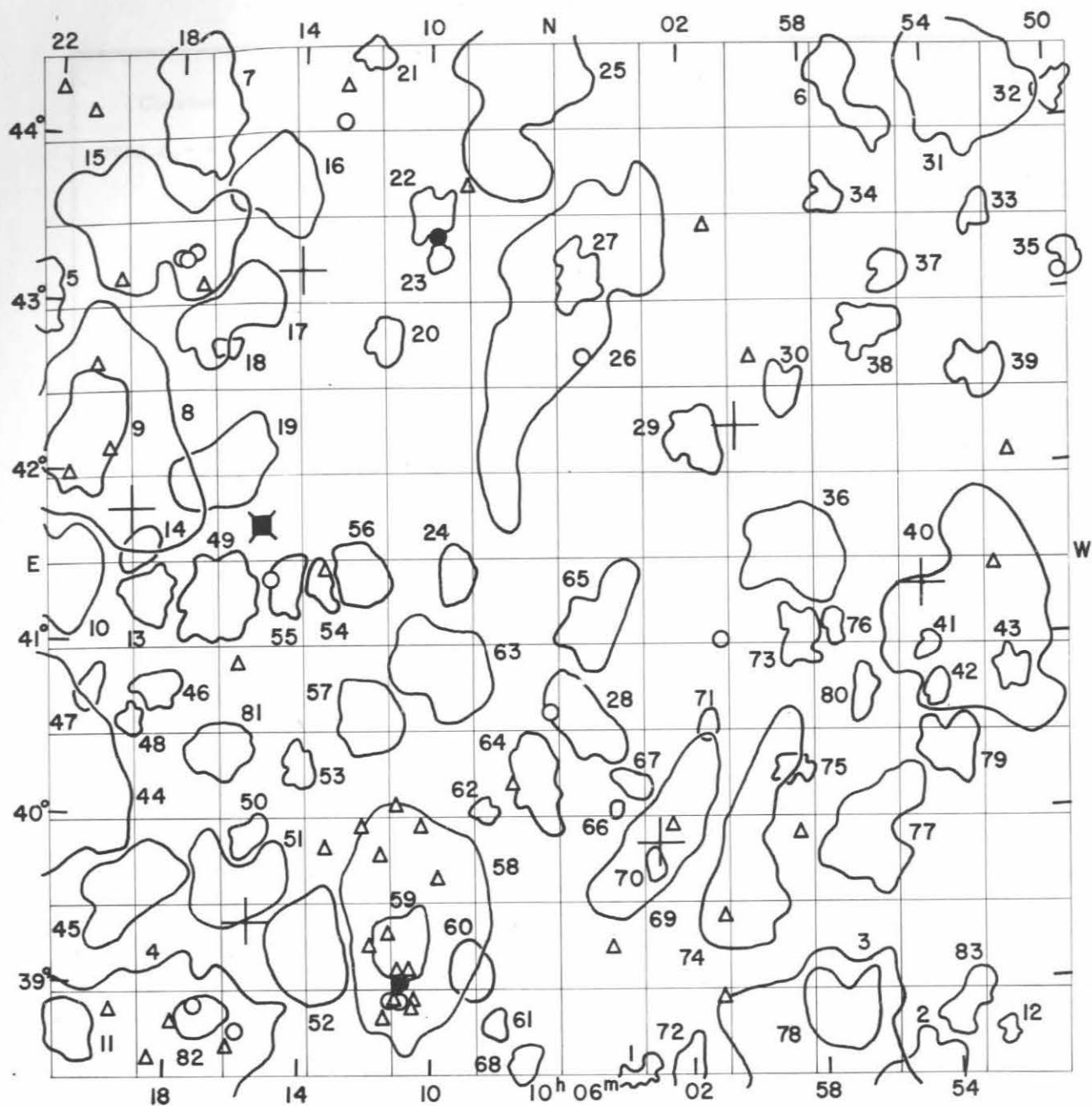
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0952.8 + 4102	medium compact	119	6.0	MD	20

Average number of galaxies per cluster = 102.3

# GALAXIES

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
9	20.5	+ 41 03		15.5		
9	20.5	+ 42 24		15.6		
9	21.2	+ 40 50		15.4		
9	21.6	+ 39 37		15.7		compact
9	21.7	+ 41 16	2860	14.8		
9	21.8	+ 38 34	2467*	14.8		
9	21.8	+ 40 37		15.2		
9	22.5	+ 40 52		15.6		
9	23.9	+ 42 47		15.5		very diffuse spiral
9	25.5	+ 38 45		15.2		
9	28.4	+ 41 32		15.7		
9	29.7	+ 42 17		15.7		
9	30.6	+ 40 13		15.5		
9	30.7	+ 44 29		15.1		
9	32.4	+ 39 21		15.7		
9	34.0	+ 41 52		15.7		
9	34.6	+ 43 19		15.0		
9	34.9	+ 42 57		15.6		
9	34.9	+ 43 12		15.7		
9	35.2	+ 43 44		14.7		
9	35.5	+ 43 24		15.3		diffuse spiral
9	35.7	+ 41 04		15.7		
9	37.4	+ 40 19		15.6		
9	38.4	+ 41 37		15.6		
9	40.0	+ 41 20		14.1		
9	40.2	+ 39 07		15.5		very compact
9	40.4	+ 39 39		15.5		
9	40.6	+ 42 42		15.3		very compact
9	40.8	+ 41 55		15.0		
9	40.8	+ 42 40		15.0		
9	40.8	+ 42 54		15.0		double system
9	42.3	+ 39 30		15.6		
9	43.9	+ 42 45		15.4		
9	44.7	+ 39 20		15.1		compact
9	44.7	+ 39 46		15.7		
9	45.5	+ 44 18	2998	13.3		$m_H = 12.8$ S
9	46.1	+ 44 15	3006	15.6		
9	46.2	+ 44 08		15.2		
9	46.4	+ 44 19	3008	15.4		
9	46.7	+ 39 05		15.5		double system, tidal effect
9	46.8	+ 39 09		15.3		very compact
9	47.4	+ 44 00		14.9		
9	49.0	+ 41 06		14.9		
9	49.7	+ 43 05		14.5		
9	51.7	+ 42 03		15.7		compact





FIELD No. 211

$10^{\text{h}}06^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 711

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
13700	9	54	37.8	+ 41 17 41	5.19
13807	10	00	21.1	+ 42 15 03	7.20
13865	10	02	55.7	+ 39 49 34	7.17
14113	10	14	05.4	+ 43 09 53	3.52
14138	10	15	36.6	+ 39 21 41	8.92
14232	10	19	21.5	+ 41 45 06	3.21

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0949.6 + 4311	medium compact	71	1.0	VD	35
0949.9 + 4409	compact	77	1.1	ED	32
0951.9 + 4047	medium compact	98	1.2	ED	43
0952.4 + 4328	medium compact	64	1.0	ED	33
0952.5 + 3841	compact	56	0.6	ED	12
0952.5 + 4232	medium compact	96	1.6	ED	39
0952.7 + 4413	open	119	4.1	MD	31
0952.8 + 4102	medium compact	119	6.0	MD	40
0953.7 + 3850	open	95	1.6	VD	83
0953.9 + 4022	compact	160	2.0	ED	79
0954.2 + 4042	medium compact	57	0.9	ED	42
0954.4 + 4057	compact	49	0.7	ED	41
0955.0 + 3815	open	107	3.6	D	2
0955.3 + 4308	medium compact	94	1.2	ED	37
0956.1 + 4248	medium compact	106	1.7	ED	38
0956.4 + 3730	open	347	14.4	Near	3
0956.5 + 3951	medium compact	85	3.1	VD	77
0956.6 + 4041	medium compact	90	1.2	ED	80
0956.9 + 4411	medium compact	84	2.3	D	6
0957.3 + 4335	compact	77	1.1	ED	34
0957.4 + 4105	compact	62	0.8	ED	76
0957.5 + 3850	medium compact	91	2.2	VD	78
0958.4 + 4101	open	77	1.6	VD	73
0958.4 + 4132	medium compact	104	3.0	D	36
0958.8 + 4015	medium compact	59	1.1	ED	75
0958.9 + 4228	medium compact	98	1.3	ED	30
1000.1 + 3946	open	95	4.0	MD	74
1001.4 + 4031	medium compact	52	0.8	ED	71
1001.7 + 4211	compact	156	1.8	ED	29
1002.1 + 3830	medium compact	98	1.3	VD	72
1002.9 + 3952	open	118	3.8	MD	69
1003.1 + 3943	medium compact	58	0.8	VD	70
1003.6 + 3829	medium compact	58	1.0	VD	1
1003.6 + 4011	medium compact	67	1.0	ED	67
1004.2 + 4002	compact	54	0.5	ED	66
1004.8 + 4108	medium compact	149	2.5	ED	65
1005.3 + 4034	medium compact	82	2.3	VD	28
1005.3 + 4310	medium compact	138	1.7	ED	27
1006.0 + 4255	open	167	6.3	MD	26
1006.7 + 4013	medium compact	210	2.1	ED	64
1007.0 + 4413	open	122	4.6	MD	25
1007.1 + 3834	medium compact	71	1.0	ED	68
1008.0 + 3847	medium compact	60	0.8	ED	61
1008.3 + 4002	medium compact	67	0.8	ED	62
1008.7 + 3905	open	61	1.6	ED	60
1009.2 + 4125	medium compact	110	1.4	ED	24
1009.6 + 4052	medium compact	108	3.1	VD	63
1009.7 + 4316	compact	56	0.8	ED	23
1010.0 + 4331	compact	126	1.4	ED	22
1010.5 + 3922	medium compact	160	6.0	Near	58
1010.8 + 3915	medium compact	134	2.1	ED	59
1011.5 + 4246	compact	111	1.2	ED	20
1011.9 + 4035	medium compact	162	2.2	VD	57
1011.9 + 4428	compact	87	1.1	ED	21
1012.2 + 4125	open	84	2.0	D	56
1013.5 + 4120	compact	131	1.2	ED	54
1013.7 + 3915	compact	412	3.0	VD	52

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1014.1 + 4016	medium compact	84	1.2	ED	53
1014.5 + 4120	open	70	1.4	VD	55
1014.9 + 4341	medium compact	148	2.8	D	16
1015.7 + 3953	compact	87	1.2	ED	50
1016.0 + 3936	medium compact	129	2.9	VD	51
1016.4 + 4257	open	83	2.8	D	17
1016.5 + 4022	medium compact	72	1.9	VD	81
1016.5 + 4200	medium compact	69	2.9	VD	19
1016.5 + 4243	compact	46	0.7	ED	18
1016.6 + 4116	compact	158	2.6	D	49
1017.0 + 3848	medium compact	62	1.5	VD	82
1017.5 + 4410	medium compact	104	3.3	VD	7
1018.4 + 4044	medium compact	97	1.3	ED	46
1018.8 + 4115	compact	133	1.6	VD	13
1019.1 + 3934	medium compact	110	2.9	D	45
1019.1 + 4131	medium compact	94	1.3	VD	14
1019.1 + 4325	open	105	4.8	MD	15
1019.3 + 4033	compact	75	0.9	ED	48
1019.8 + 3653	medium compact	456	18.3	Near	4
1020.4 + 4210	open	142	6.4	Near	8
1020.6 + 4043	medium compact	59	1.1	ED	47
1020.9 + 3843	medium compact	71	1.8	VD	11
1021.0 + 4211	open	100	3.0	D	9
1022.2 + 4123	medium compact	129	3.7	D	10
1022.9 + 4301	medium compact	210	2.1	ED	5
1026.9 + 4023	medium compact	570	13.0	Near	44

Average number of galaxies per cluster = 115.3

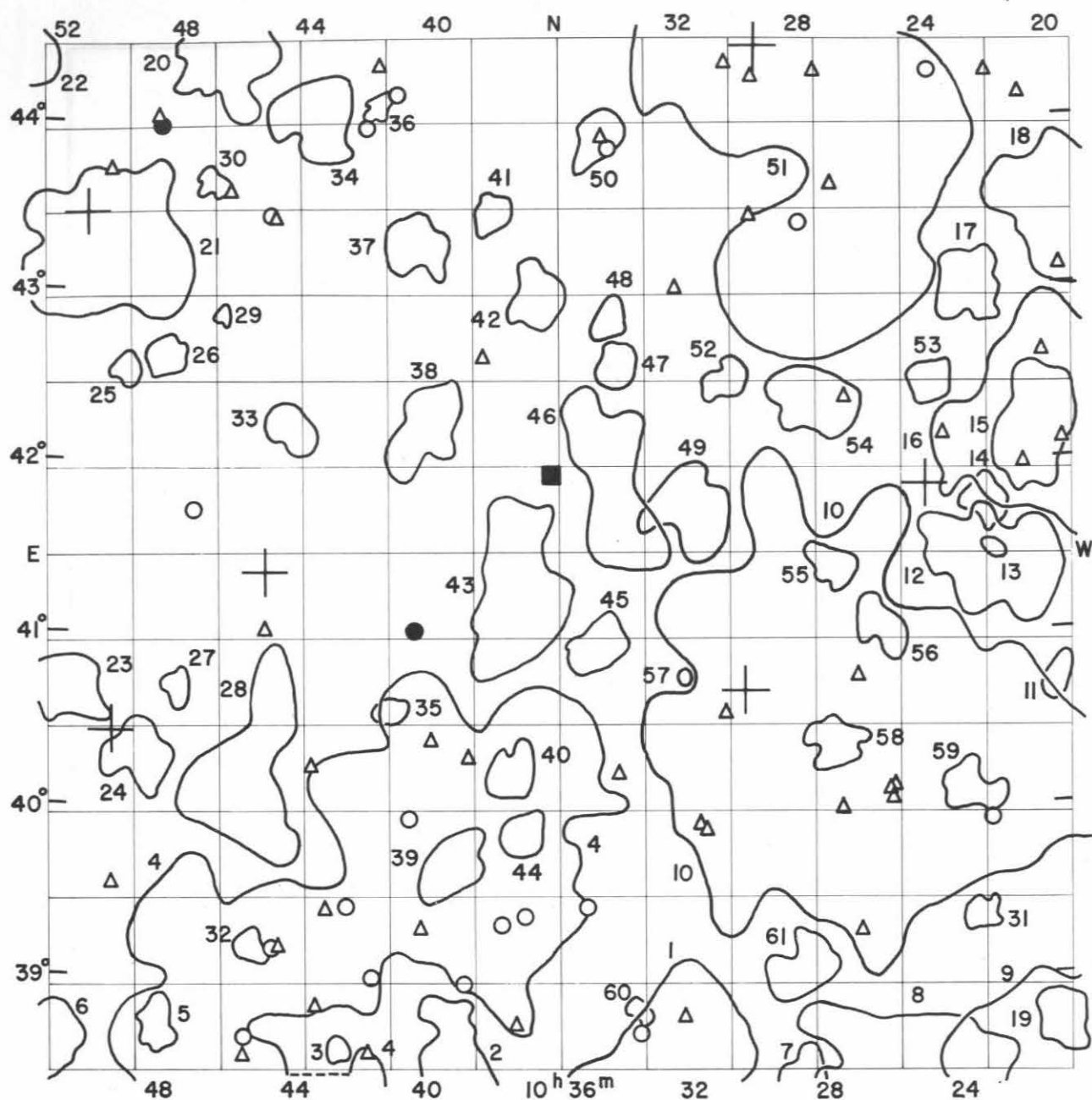
#### GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
9	49.7	+43 05		14.5		
9	51.7	+42 03		15.7		compact
9	52.3	+41 23		15.7		diffuse
9	58.6	+39 52		15.7		
9	59.8	+42 39		15.6		
10	00.9	+41 00	3104	14.2		
10	01.0	+38 55		15.7		
10	01.0	+39 23		15.7		
10	01.2	+43 25		15.6		
10	02.5	+39 56		15.7		
10	04.3	+39 13		15.5		
10	05.1	+42 40		14.9		
10	06.2	+40 37		14.6		
10	07.4	+40 11		15.5		
10	08.8	+43 40		15.7		
10	09.7	+39 38		15.5		
10	09.9	+43 24	598*	13.8		
10	10.3	+39 56		15.7		
10	10.4	+38 55	3150	15.4		
10	10.5	+38 53	3151	15.1		
10	10.6	+39 06	3152	15.5		
10	10.8	+39 01	3158	13.4	+7024	m <sub>H</sub> = 12.7 E
10	10.9	+38 55	3159	14.9	+6950	
10	10.9	+39 06	3160	15.2		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
10	11.0	+38	55	3161	15.3	+6204	
10	11.0	+40	04		15.5		
10	11.1	+38	55	3163	14.4	+6245	
10	11.2	+39	18		15.5		
10	11.4	+38	49		15.6		
10	11.5	+39	45		15.4		
10	11.8	+39	14		15.2		
10	12.0	+39	55		15.6		
10	12.7	+44	14		15.4		
10	12.8	+44	02		14.7		
10	13.2	+39	48		15.5		
10	13.3	+41	25		15.3		
10	15.0	+41	22	3179	14.2		
10	15.3	+41	40	3184	10.4	+ 419	$m_H = 11.8$ Sc
10	15.9	+38	44		14.6		
10	16.0	+40	52		15.4		
10	16.1	+38	38		15.6		
10	17.1	+38	53		14.3		
10	17.3	+43	05		15.6		
10	17.5	+43	16	3202	14.2		
10	17.8	+38	47		15.6		
10	17.8	+43	13	3205	14.4		
10	18.0	+43	14	3207	14.3		
10	18.5	+38	34		15.7		
10	19.7	+38	50	3219	15.4		double system, faint bridge
10	19.9	+43	06		15.7		compact
10	20.1	+42	06		15.7		
10	20.6	+42	36		15.5		double system
10	21.0	+44	07		15.4		
10	21.4	+41	58		15.2		double system
10	22.0	+44	15		15.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3158	-	-	13.11	E3	13.2	E3	-	-
3159	-	-	-	-	-	E2	-	-
3161	-	-	-	-	-	E3	-	-
3163	-	-	-	-	-	E1	-	-
3184	11.2	Sc	10.66	Sc	10.2	Sc	10.28	Sc-



FIELD No. 212

$10^{\text{h}}36^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 690

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
14347	10	24	30.8	+	41	51 26	5.80
14466	10	29	30.5	+	44	26 22	7.32
14491	10	30	19.3	+	40	41 00	4.84
14856	10	45	10.4	+	41	22 26	6.85
14947	10	49	52.2	+	40	26 15	7.38
14974	10	51	06.5	+	43	27 24	4.84



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1019.1 + 4325	open	105	4.8	MD	18
1019.8 + 3653	medium compact	456	18.3	Near	9
1020.4 + 4210	open	142	6.4	Near	16
1020.6 + 4043	medium compact	59	1.1	ED	11
1020.9 + 3843	medium compact	71	1.8	VD	19
1021.0 + 4211	open	100	3.0	D	15
1022.2 + 4123	medium compact	129	3.7	D	12
1022.4 + 4130	compact	59	0.6	ED	13
1022.5 + 4146	medium compact	58	1.4	VD	14
1022.9 + 4301	medium compact	210	2.1	ED	17
1023.2 + 3921	compact	86	1.1	VD	31
1023.5 + 4005	medium compact	138	1.6	VD	59
1024.2 + 4228	medium compact	102	1.3	ED	53
1025.5 + 3803	medium compact	431	7.3	MD	8
1026.0 + 4102	medium compact	143	1.6	VD	56
1026.9 + 4023	medium compact	570	13.0	Near	10
1027.4 + 4123	medium compact	77	1.4	VD	55
1027.6 + 4022	compact	107	1.7	VD	58
1028.0 + 4223	medium compact	122	2.5	D	54
1028.2 + 4357	open	200	10.3	Near	51
1028.6 + 3903	medium compact	74	2.0	D	61
1028.7 + 3822	medium compact	85	1.8	VD	7
1030.7 + 4231	medium compact	108	1.3	ED	52
1031.8 + 4145	open	84	2.6	VD	49
1032.1 + 4046	compact	37	0.4	ED	57
1033.3 + 3804	open	198	7.0	Near	1
1033.6 + 3849	medium compact	57	0.8	ED	60
1034.0 + 4236	medium compact	103	1.3	VD	47
1034.2 + 4154	medium compact	135	3.7	D	46
1034.3 + 4251	compact	110	1.1	ED	48
1034.7 + 4357	open	101	1.6	ED	50
1034.8 + 4057	medium compact	186	1.8	ED	45
1036.7 + 4300	medium compact	79	1.9	VD	42
1037.1 + 3952	compact	104	1.4	ED	44
1037.2 + 4117	open	100	4.0	D	43
1037.6 + 4013	medium compact	103	1.7	VD	40
1038.1 + 4330	compact	69	1.2	ED	41
1038.5 + 3802	open	189	5.2	MD	2
1039.4 + 3941	compact	117	2.1	D	39
1040.2 + 4213	medium compact	100	2.4	VD	38
1040.6 + 4318	medium compact	158	2.0	ED	37
1041.3 + 4035	compact	64	0.9	ED	35
1041.9 + 4406	medium compact	62	0.8	ED	36
1042.4 + 3910	medium compact	344	12.7	Near	4
1042.7 + 3836	compact	79	0.6	ED	3
1044.0 + 4403	medium compact	129	2.6	VD	34
1044.6 + 4213	medium compact	90	1.5	ED	33
1045.5 + 3911	compact	83	1.0	ED	32
1045.6 + 4008	open	88	4.7	D	28
1046.7 + 4430	medium compact	159	3.7	VD	20
1046.8 + 4253	compact	51	0.5	ED	29
1047.2 + 4339	medium compact	58	0.9	ED	30
1047.9 + 4042	medium compact	82	1.0	ED	27
1048.1 + 3844	medium compact	108	1.4	VD	5
1048.6 + 4239	compact	163	1.2	ED	26
1049.0 + 4019	compact	165	2.1	VD	24
1049.8 + 4234	medium compact	69	0.9	ED	25

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1050.6 + 4316	medium compact	145	5.3	D	21
1051.2 + 3838	compact	159	2.2	D	6
1051.4 + 4041	medium compact	141	2.4	D	23
1055.6 + 4432	open	126	5.6	MD	22

Average number of galaxies per cluster = 131.6

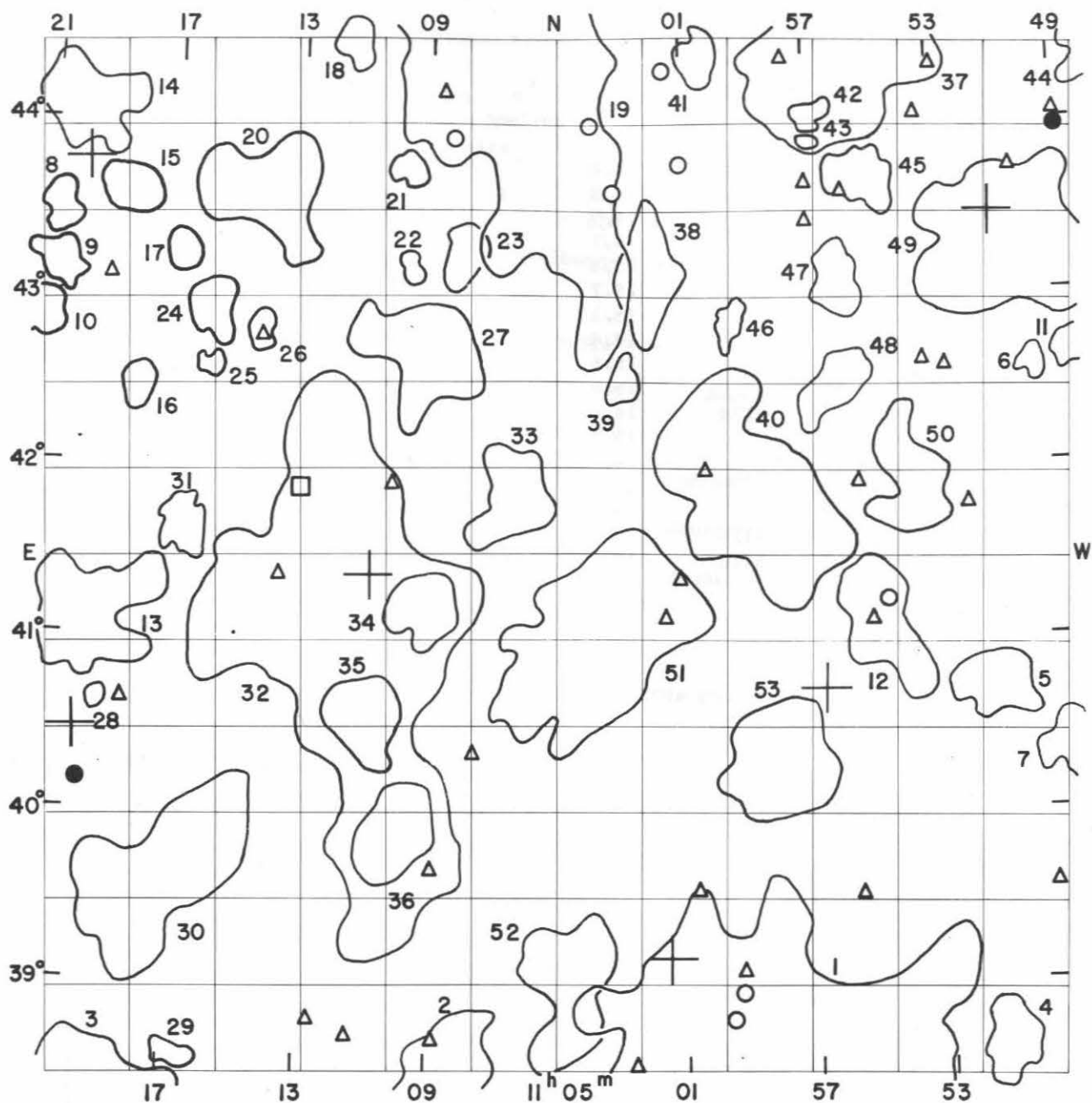
# GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
10	19.9	+43 06		15.7		compact
10	20.1	+42 06		15.7		
10	20.6	+42 36		15.5		double system
10	21.0	+44 07		15.4		
10	21.4	+41 58		15.2		double system
10	22.0	+44 15		15.6		
10	22.8	+39 55	3237	14.2		
10	23.9	+42 09		15.4		
10	23.9	+44 15		15.0		
10	25.8	+40 02		15.7		
10	25.8	+40 06		15.5		
10	25.9	+40 05		15.6		
10	26.8	+40 45		15.3		
10	26.9	+39 16		15.4		
10	27.0	+42 23		15.5		
10	27.2	+43 37		15.4		
10	27.4	+39 59		15.7		
10	27.7	+44 15		15.2		
10	28.3	+43 23		14.7		
10	29.7	+44 14		15.2		
10	29.9	+43 25		15.7		
10	30.5	+44 19		15.3		double system
10	30.9	+40 33		15.1		
10	31.6	+39 53		15.6		compact
10	31.7	+39 54		15.6		compact
10	32.2	+43 01		15.5		
10	32.3	+38 46		15.5		
10	33.6	+38 42		14.5		
10	34.1	+40 13		15.7		
10	34.3	+43 51		14.6		
10	34.5	+43 55		15.7		
10	35.1	+39 26		14.9		
10	36.2	+41 57	3319	12.0	+ 826	m <sub>H</sub> = 12.3 S
10	37.0	+39 23		14.7		
10	37.4	+38 45		15.2		
10	37.8	+39 20		14.6		double system, bridge
10	38.4	+42 38		15.5		
10	38.8	+40 18		15.1		
10	38.9	+38 59		14.5		triple system
10	40.0	+40 24		15.2		
10	40.2	+39 18		15.1		
10	40.5	+41 03		14.0		
10	40.6	+39 57		14.8		
10	41.2	+44 10		14.8		
10	41.7	+39 01		15.0		
10	41.8	+38 34		15.3		

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
10	41.8	+44 19		15.7		
10	42.2	+43 58		14.9		
10	42.5	+39 26		14.9		double system, faint bridge
10	43.1	+39 25		15.7		
10	43.4	+38 50		15.5		double system
10	43.7	+40 15		15.7		
10	44.5	+39 12		15.1		
10	44.8	+39 12		14.4		double system, connected
10	45.0	+43 24		15.6		
10	45.1	+41 02		15.6		
10	45.1	+43 26	3374	14.6		
10	45.6	+38 33		15.6		
10	45.6	+38 40		14.7		
10	46.5	+43 34		15.6		
10	47.5	+41 44		14.5		double system, halo
10	48.8	+43 59	3415	13.2		$m_H = 13.1$
10	48.9	+44 02	3416	15.2		
10	49.7	+39 32		15.7		
10	50.4	+43 43		15.3		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
3319	- -	- -	- SBc	11.67 Sc+



FIELD No. 213

$11^{\text{h}}05^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 1349

# GC STARS

Nos.	R. A.			Decl.	$m_p$
	h	m	s		
14974	10	51	06.5	+ 43 27 24	4.84
15087	10	56	40.4	+ 40 41 52	5.14
15213	11	01	31.3	+ 39 08 17	7.22
15425	11	10	54.3	+ 41 21 39	6.49
15622	11	19	58.8	+ 40 26 59	6.63
15625	11	20	05.4	+ 43 45 26	5.06

## CLUSTERS OF GALAXIES

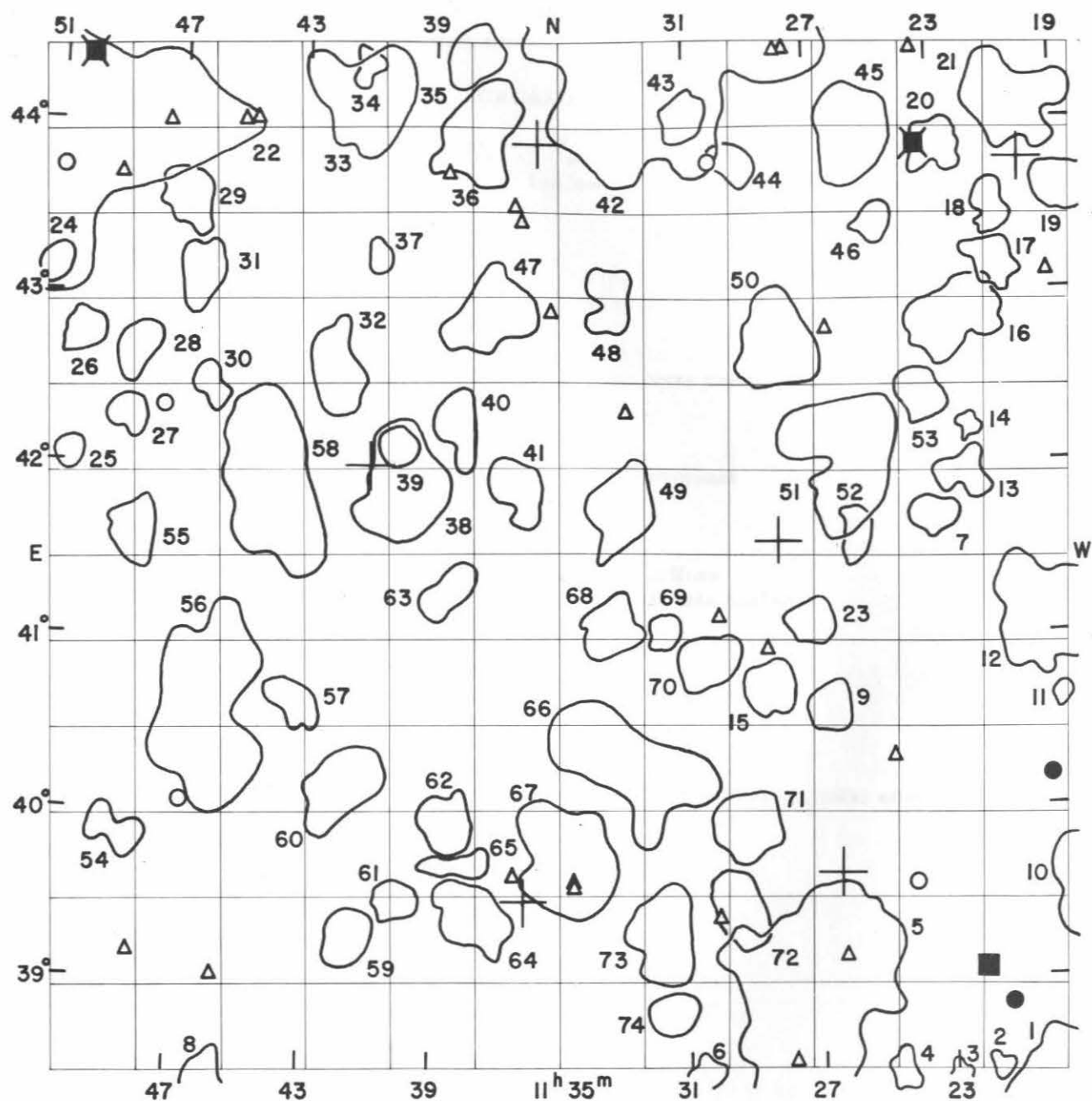
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1046.7 + 4430	medium compact	159	3.7	VD	44
1048.6 + 4239	compact	163	1.2	ED	11
1049.0 + 4019	compact	165	2.1	VD	7
1049.8 + 4234	medium compact	69	0.9	ED	6
1050.6 + 4316	medium compact	145	5.3	D	49
1051.2 + 3838	compact	159	2.2	D	4
1051.4 + 4041	medium compact	141	2.4	D	5
1053.7 + 4155	medium compact	67	2.9	VD	50
1054.9 + 4104	compact	127	3.2	D	12
1055.2 + 4340	open	132	2.0	ED	45
1055.6 + 4432	open	126	5.6	MD	37
1056.0 + 4305	medium compact	127	1.8	ED	47
1056.2 + 4228	medium compact	147	2.0	ED	48
1056.8 + 4353	compact	52	0.5	ED	43
1056.8 + 4402	compact	71	1.0	ED	42
1057.2 + 3804	open	535	13.2	Near	1
1058.0 + 4016	open	80	3.6	VD	53
1058.8 + 4149	medium compact	170	5.8	D	40
1059.5 + 4250	medium compact	69	1.1	ED	46
1100.4 + 4423	compact	106	1.6	ED	41
1102.0 + 4307	open	78	2.8	D	38
1102.9 + 4230	medium compact	93	1.2	ED	39
1103.5 + 4100	open	132	6.0	MD	51
1104.5 + 3857	open	87	3.4	D	52
1106.4 + 4150	medium compact	88	2.7	D	33
1106.7 + 4414	medium compact	332	9.2	MD	19
1107.9 + 4314	compact	111	1.6	ED	23
1109.1 + 3806	compact	206	4.7	Near	2
1109.1 + 4239	medium compact	120	3.6	D	27
1109.2 + 4111	medium compact	83	2.2	D	34
1109.6 + 4309	medium compact	79	0.8	ED	22
1109.7 + 4344	compact	85	1.0	ED	21
1110.0 + 3953	medium compact	94	2.7	MD	36
1111.0 + 4032	medium compact	104	2.5	MD	35
1111.3 + 4051	open	470	10.3	MD	32
1111.6 + 4429	medium compact	68	1.4	ED	18
1114.3 + 4335	open	90	3.5	D	20
1114.4 + 4246	compact	84	1.0	ED	26
1115.9 + 4254	medium compact	116	1.7	ED	24
1116.0 + 4235	compact	63	0.7	ED	25
1116.6 + 3833	medium compact	46	1.1	ED	29
1116.7 + 4138	medium compact	132	1.7	ED	31
1117.0 + 4315	compact	85	1.2	ED	17
1117.2 + 3935	open	41	5.1	D	30
1118.3 + 4227	compact	105	1.3	ED	16
1118.8 + 3812	medium compact	161	4.9	MD	3
1118.8 + 4335	medium compact	119	1.8	ED	15
1119.4 + 4038	compact	67	0.6	ED	28
1119.5 + 4105	open	132	3.6	MD	13
1120.1 + 4406	open	86	2.8	ED	14
1121.0 + 4310	medium compact	82	1.6	VD	9
1121.0 + 4329	medium compact	141	1.4	ED	8
1122.3 + 4250	medium compact	259	2.7	VD	10

Average number of galaxies per cluster = 129.2

## GALAXIES

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
10	48.8	+43 59	3415	13.2		$m_H = 13.1$
10	48.9	+44 02	3416	15.2		
10	49.7	+39 32		15.7		
10	50.4	+43 43		15.3		
10	52.0	+41 46		15.7		
10	52.6	+42 34		15.5		
10	52.9	+44 19		15.2		very compact
10	53.3	+42 36		15.4		
10	53.5	+44 01		15.2		
10	54.6	+41 13	3468	14.2		
10	55.1	+41 06		15.6		compact
10	55.5	+41 55		15.7		
10	55.6	+39 30		15.7		
10	55.9	+43 35		15.5		
10	57.0	+43 25		15.7		diffuse
10	57.0	+43 38		15.7		double nucleus
10	57.8	+44 21		15.6		
10	59.2	+39 03	2616*	15.6		
10	59.3	+38 56	2617*	15.0		
10	59.5	+38 46	2620*	14.9		compact
11	00.3	+41 58		15.1		
11	00.6	+39 31		15.5		
11	01.1	+41 20		15.6		
11	01.1	+43 45		14.6		double system, tidal effect
11	01.6	+41 07		15.5		compact
11	01.6	+44 18		14.7		
11	02.5	+38 30		15.4		
11	03.2	+43 36		14.6		
11	04.0	+44 00		14.4		
11	07.6	+40 20		15.7		
11	08.3	+43 54	674*	14.5		
11	08.7	+38 40		15.6		
11	08.7	+44 10		15.2		
11	08.8	+39 39		15.4		
11	10.2	+41 54		15.7		
11	11.4	+38 41		15.7		
11	12.5	+38 46		15.6		
11	13.0	+41 52	3600	12.6		
11	13.7	+41 21		15.3		
11	14.4	+42 44		15.4		peculiar streamers
11	18.5	+40 37		15.5		
11	19.3	+43 05		15.3		
11	19.8	+40 09	3648	13.5		

9 .



FIELD No. 214

$11^{\text{h}}35^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 719

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
15625	11	20	05.4	+ 43 45 26	5.06
15751	11	26	22.9	+ 39 36 44	5.26
15787	11	28	07.9	+ 41 33 51	6.99
15962	11	35	41.1	+ 43 54 10	5.52
15979	11	36	10.8	+ 39 26 58	7.42
16088	11	40	58.7	+ 42 00 00	6.81



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1117.2 + 3935	open	41	5.1	D	10
1118.8 + 3812	medium compact	161	4.9	MD	1
1118.8 + 4335	medium compact	119	1.8	ED	19
1119.4 + 4038	compact	67	0.6	ED	11
1119.5 + 4105	open	132	3.6	MD	12
1120.1 + 4406	open	86	2.8	ED	21
1121.0 + 4310	medium compact	82	1.6	VD	17
1121.0 + 4329	medium compact	141	1.4	ED	18
1121.6 + 3827	medium compact	68	0.6	ED	2
1121.9 + 4212	medium compact	66	0.6	ED	14
1122.1 + 4156	medium compact	71	1.5	VD	13
1122.3 + 4250	medium compact	259	2.7	VD	16
1122.8 + 4351	open	99	1.7	VD	20
1122.9 + 3811	open	93	1.7	VD	3
1123.1 + 4142	compact	110	1.3	VD	7
1123.5 + 4224	compact	65	1.5	VD	53
1124.6 + 3826	medium compact	103	0.9	ED	4
1124.8 + 4325	medium compact	90	1.1	ED	46
1125.5 + 4356	compact	107	2.8	VD	45
1125.6 + 4136	compact	115	1.3	ED	52
1125.9 + 4201	medium compact	96	3.7	MD	51
1126.6 + 4035	compact	55	1.4	ED	9
1127.1 + 3850	medium compact	659	6.1	D	5
1127.1 + 4105	medium compact	72	1.4	ED	23
1128.0 + 4243	medium compact	87	2.7	VD	50
1128.5 + 4042	medium compact	88	1.6	ED	15
1129.1 + 3955	medium compact	131	2.2	VD	71
1129.4 + 3925	compact	190	2.1	ED	72
1129.4 + 4346	medium compact	67	1.3	ED	44
1130.4 + 4052	medium compact	60	1.8	VD	70
1130.9 + 3810	medium compact	142	2.7	D	6
1131.0 + 4403	medium compact	77	1.4	ED	43
1131.5 + 3848	compact	66	1.4	VD	74
1131.6 + 4421	open	113	7.3	Near	42
1131.7 + 4102	compact	55	1.0	ED	69
1131.8 + 3916	medium compact	75	2.5	D	73
1132.6 + 4015	compact	560	4.0	ED	66
1133.0 + 4145	medium compact	110	2.4	VD	49
1133.2 + 4259	medium compact	128	1.7	ED	48
1133.3 + 4104	compact	73	1.8	VD	68
1134.6 + 3942	medium compact	109	3.4	D	67
1136.3 + 4152	medium compact	120	1.8	ED	41
1137.1 + 4255	open	118	2.6	D	47
1137.5 + 4356	medium compact	104	2.8	MD	36
1137.6 + 3922	compact	81	2.2	ED	64
1137.8 + 4425	medium compact	92	1.8	VD	35
1138.1 + 3941	medium compact	53	1.1	VD	65
1138.1 + 4215	medium compact	96	1.7	ED	40
1138.4 + 3956	compact	119	1.8	ED	62
1138.5 + 4116	medium compact	67	1.5	ED	63
1139.9 + 4153	medium compact	97	3.2	VD	38
1140.0 + 3928	compact	68	1.3	ED	61
1140.0 + 4208	compact	86	1.2	ED	39
1140.7 + 4313	compact	57	0.8	ED	37
1141.2 + 4409	medium compact	135	3.2	VD	33
1141.2 + 4420	compact	68	0.9	ED	34
1141.5 + 3915	open	78	1.6	ED	59

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1141.7 + 4008	compact	182	2.4	VD	60
1142.0 + 4232	medium compact	73	2.3	VD	32
1143.2 + 4037	compact	108	1.5	ED	57
1144.0 + 4152	medium compact	158	4.2	VD	58
1145.7 + 3821	medium compact	81	1.8	VD	8
1145.9 + 4034	medium compact	95	4.6	D	56
1146.0 + 4227	medium compact	75	1.1	ED	30
1146.3 + 4306	medium compact	115	1.7	ED	31
1146.8 + 4332	medium compact	129	1.7	ED	29
1148.3 + 4136	medium compact	89	1.7	ED	55
1148.4 + 4239	compact	171	1.5	ED	28
1148.6 + 4216	compact	73	1.2	ED	27
1148.8 + 3952	medium compact	96	1.4	ED	54
1150.1 + 4245	compact	102	1.4	ED	26
1150.5 + 4202	compact	63	0.9	ED	25
1151.1 + 4309	compact	109	1.1	ED	24
1157.2 + 4332	open	463	15.5	Near	22

Average number of galaxies per cluster = 117.7

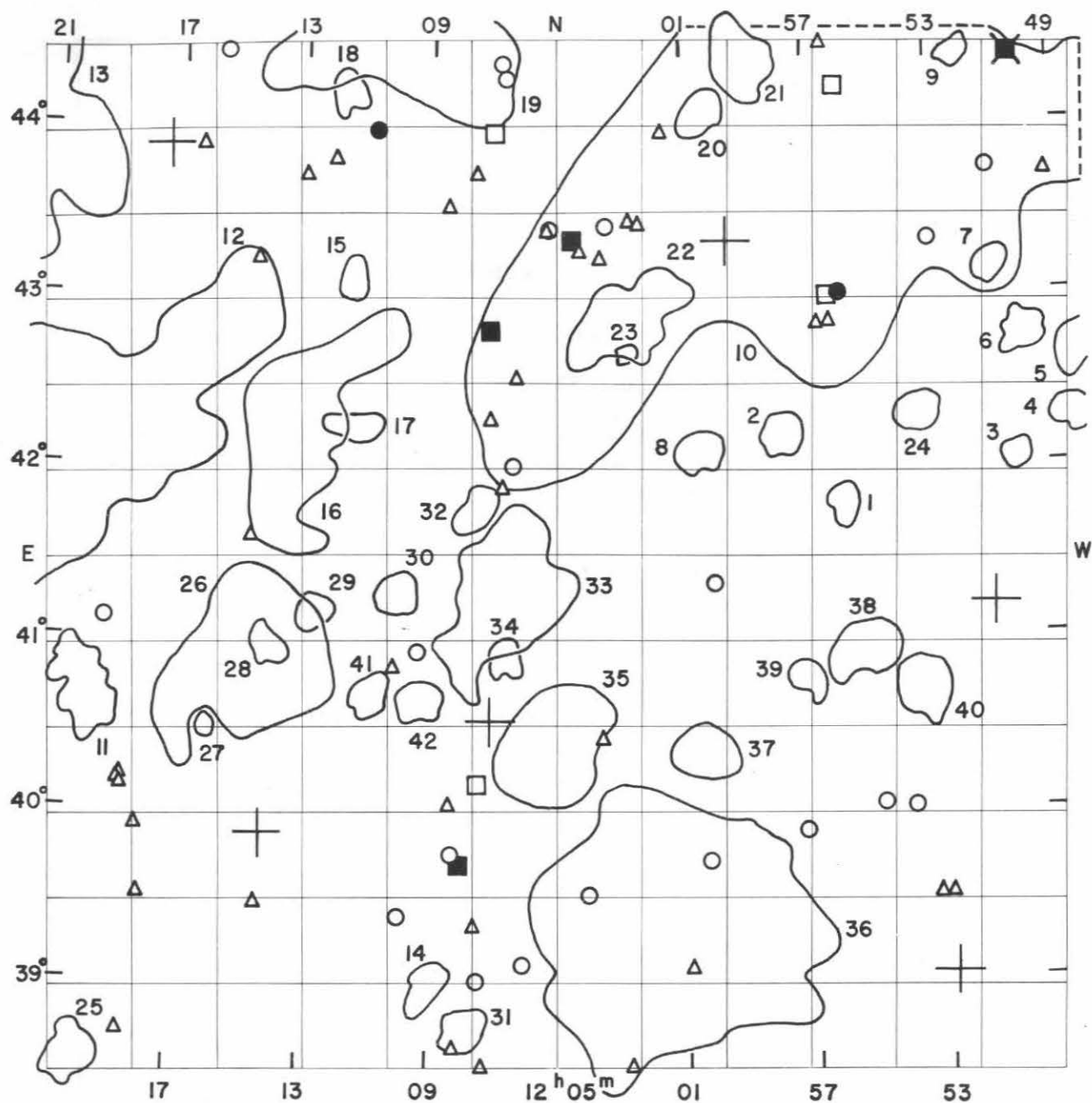
#### GALAXIES

Position a 1950 $\delta$ h m o			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
11 19.3 + 43 05				15.3		
11 19.8 + 40 09			3648	13.5		
11 21.3 + 38 50			3658	13.3		
11 22.0 + 39 02			3665	11.6	+2002	$m_H = 12.3$ Sa
11 23.4 + 43 52			3675	10.4	+ 688	$m_H = 11.8$ Sb
11 23.5 + 44 26				15.5		
11 24.0 + 39 32				15.0		compact
11 24.6 + 40 16				15.6		
11 26.3 + 39 07			2861*	15.5		
11 26.5 + 42 47				15.7		
11 27.6 + 44 26				15.4		double system
11 27.8 + 38 31				15.5		compact
11 28.0 + 44 26				15.3		
11 28.5 + 40 55				15.7		
11 30.0 + 41 07				15.4		
11 30.1 + 39 21				15.7		extremely diffuse spiral
11 30.2 + 43 47				14.9		
11 32.9 + 42 18				15.7		
11 34.6 + 39 32				15.6		
11 34.6 + 39 33				15.6		
11 35.2 + 42 55				15.7		
11 36.2 + 43 26				15.4		
11 36.4 + 43 31				15.3		
11 36.5 + 39 36				15.2		
11 38.5 + 43 43				15.5		
11 44.7 + 44 02				15.4		
11 45.1 + 44 01				15.2		
11 45.6 + 39 01				15.7		diffuse
11 46.7 + 40 03				14.8		
11 47.6 + 42 20				14.2		
11 47.6 + 44 00				15.1		
11 48.2 + 39 09				15.1		diffuse + disrupted
11 49.2 + 43 42				15.6		

a	Position		NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
	1950	δ'				
h	m	o				
11	50.2	+44 23	3938	11.0	+ 874	m <sub>H</sub> = 11.6 Sb
11	51.0	+43 44		14.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956	Holmberg 1958	
3665	-	-	11.94	S0	11.9	S0	- -
3675	10.5	-	-	-	10.7	Sb	- -
3938	11.0	Sb	-	-	-	Sc	10.79 Sc-



FIELD No. 215  
 $12^{\text{h}}05^{\text{m}} + 41^{\circ}30'$   
 Survey Plate No. 1367

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
16269	11	51	15.0	+	41	11 31	6.70
16300	11	52	47.2	+	39	02 08	7.07
16445	11	59	34.8	+	43	19 23	5.07
16607	12	07	07.0	+	40	31 51	7.40
16758	12	14	12.2	+	39	52 12	7.12
16819	12	17	30.1	+	43	53 11	7.60

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1148.4 + 4239	compact	171	1.5	ED	5
1148.6 + 4216	compact	73	1.2	ED	4
1150.1 + 4245	compact	102	1.4	ED	6
1150.5 + 4202	compact	63	0.9	ED	3
1151.1 + 4309	compact	109	1.1	ED	7
1152.0 + 4425	medium compact	83	0.9	ED	9
1153.5 + 4041	medium compact	114	1.9	ED	40
1153.5 + 4218	compact	71	1.3	ED	24
1155.3 + 4055	compact	93	2.0	ED	38
1155.9 + 4146	medium compact	54	1.1	ED	1
1157.1 + 4045	medium compact	59	1.1	ED	39
1157.2 + 4332	open	463	15.5	Near	10
1157.8 + 4211	medium compact	60	1.3	ED	2
1159.0 + 4424	medium compact	192	2.2	ED	21
1200.4 + 4020	medium compact	90	1.9	ED	37
1200.4 + 4404	compact	88	1.4	ED	20
1200.5 + 4205	compact	83	1.4	ED	8
1201.5 + 3916	medium compact	210	8.9	Near	36
1202.8 + 4240	compact	35	0.6	ED	23
1202.9 + 4252	medium compact	101	3.1	MD	22
1205.1 + 4022	medium compact	149	3.7	ED	35
1206.6 + 4053	compact	65	1.1	ED	34
1206.6 + 4115	medium compact	120	4.4	MD	33
1207.6 + 4145	medium compact	60	1.3	VD	32
1207.9 + 3843	compact	56	1.4	ED	31
1209.0 + 3857	medium compact	63	1.3	ED	14
1209.3 + 4039	compact	70	1.4	ED	42
1209.7 + 4429	open	120	5.7	MD	19
1210.0 + 4116	compact	46	1.3	ED	30
1210.8 + 4040	compact	71	1.3	ED	41
1211.3 + 4214	medium compact	62	1.3	VD	17
1211.5 + 4305	compact	54	1.1	ED	15
1211.8 + 4411	compact	68	1.2	ED	18
1212.6 + 4110	medium compact	51	1.1	ED	29
1213.0 + 4213	open	109	5.2	D	16
1214.1 + 4058	compact	60	1.1	ED	28
1214.7 + 4052	open	150	5.3	MD	26
1216.0 + 4030	compact	48	0.6	ED	27
1219.7 + 3833	medium compact	67	1.6	VD	25
1219.7 + 4042	medium compact	230	2.3	ED	11
1219.9 + 4206	open	202	8.7	MD	12
1221.9 + 4347	open	118	5.6	MD	13

Average number of galaxies per cluster = 103.6

## GALAXIES

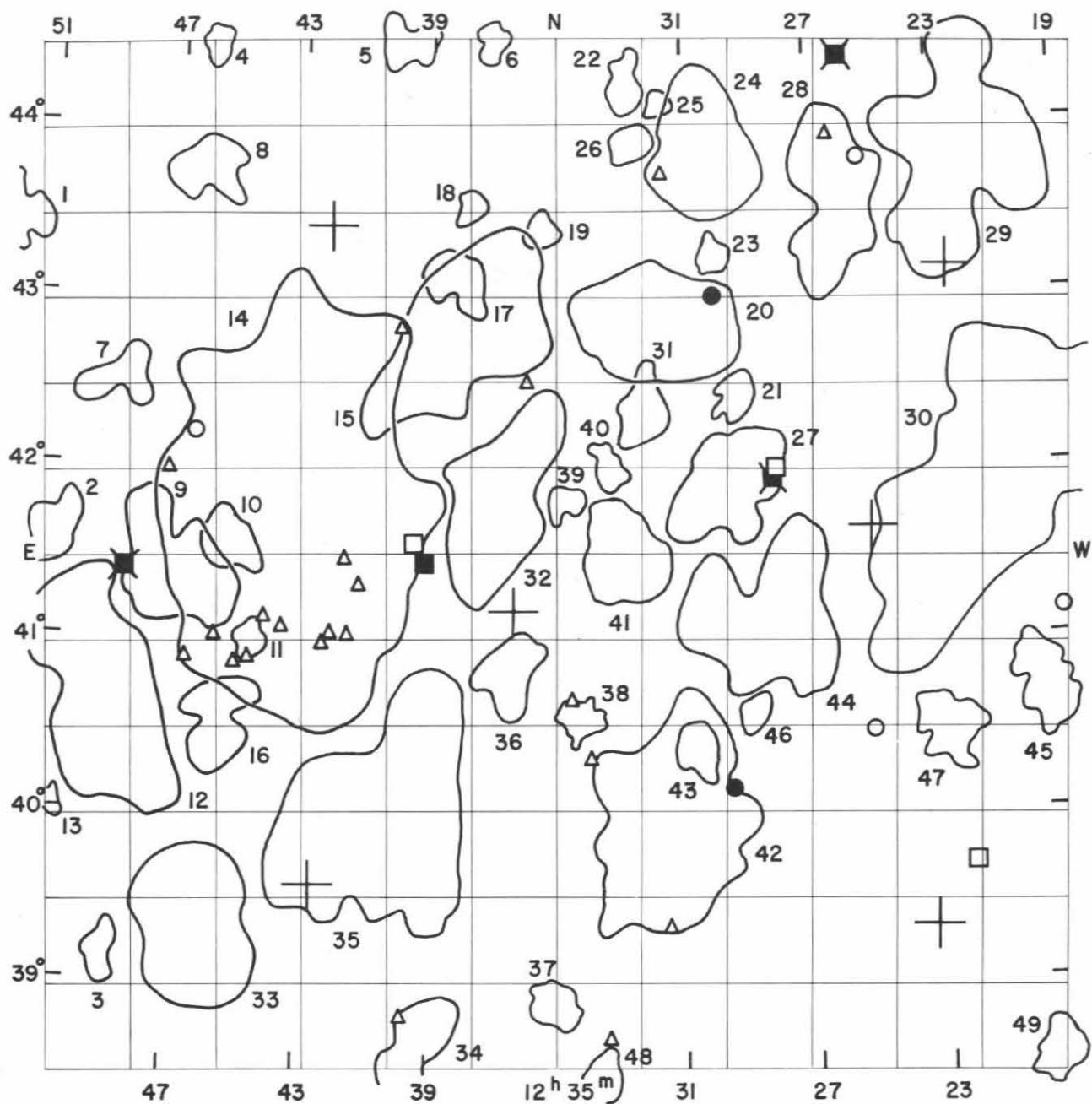
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
11	49.2	+ 43 42		15.6		
11	50.2	+ 44 23	3938	11.0	+ 874	m <sub>H</sub> = 11.6 Sb
11	51.0	+ 43 44		14.7		
11	52.8	+ 39 30		15.7		very diffuse spiral
11	53.0	+ 43 19		14.4		
11	53.2	+ 39 30		15.6		diffuse

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
11	53.8	+40	01		14.7		
11	54.8	+40	02		14.9		
11	56.0	+43	00	749*	13.4		$m_H = 13.2$
11	56.0	+44	13	4013	12.4		$m_H = 12.7$ Sc
11	56.3	+42	50	751*	15.1		
11	56.3	+42	59	750*	12.7		$m_H = 13.0$
11	56.4	+44	28		15.7		
11	56.7	+42	50	752*	15.2		
11	57.3	+39	52		14.6		
12	00.0	+41	20		14.4		
12	00.3	+39	43		14.7		
12	00.8	+39	05	2987*	15.3		
12	01.7	+43	57		15.4		compact
12	02.4	+43	25		15.7		
12	02.6	+38	31		15.3		
12	02.7	+43	26		15.2		
12	03.4	+43	25		14.8		
12	03.5	+40	26		15.2		
12	03.6	+43	14		15.6		
12	04.0	+39	30		14.5		
12	04.3	+43	16	4109	15.1		
12	04.5	+43	20	4111	11.4	+ 827	$m_H = 11.6$ E
12	05.2	+43	24	4117	14.3		
12	05.3	+43	23	4118	15.7		
12	06.0	+39	06	3014*	14.4		
12	06.3	+42	31		15.5		compact
12	06.4	+42	01		14.3		
12	06.6	+44	16	4135	14.8		
12	06.7	+41	53		15.2		compact
12	06.8	+44	21	4137	15.0		
12	07.0	+43	57	4138	12.1	+ 1039	$m_H = 12.2$ Sa
12	07.1	+42	17		15.5		
12	07.1	+42	48	4143	12.0	+ 784	$m_H = 12.2$ Sa
12	07.3	+38	30		15.4		
12	07.5	+39	00	3022*	14.6		compact
12	07.5	+40	10	4145	12.2		$m_H = 12.2$ Sc
12	07.5	+43	43		15.5		
12	07.6	+39	20		15.6		diffuse
12	08.0	+39	41	4151	11.2	+ 947	$m_H = 11.2$ Sb
12	08.2	+38	37		15.3		
12	08.3	+39	45	4156	14.3		
12	08.4	+40	02		15.3		double nebula, connected
12	08.5	+43	31		15.6		
12	09.4	+40	56		15.0		double system
12	09.9	+39	23		14.6		
12	10.1	+40	50		15.5		diffuse spiral
12	10.7	+43	58	4183	13.5		
12	12.1	+43	48		15.3		
12	13.0	+43	42		15.4		
12	14.3	+39	28		15.7		
12	14.6	+43	13		15.4		compact
12	14.7	+41	35		15.7		
12	15.7	+44	27		14.2		double system, faint bridge
12	16.4	+43	53		15.5		
12	17.8	+39	30		15.6		
12	18.0	+39	55		15.5		compact
12	18.4	+38	42		15.4		
12	18.5	+40	08		15.1		
12	18.5	+40	11		15.4		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	'				
12	18.6	+ 40	10		15.2		
12	19.1	+ 41	08		14.2		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3938	11.0	Sb	-	-	-	Sc	10.79	Sc-
4013	11.6	-	-	-	-	-	-	-
4111	-	-	-	-	11.6	S0	11.63	S0
4138	-	-	-	-	12.4	Sa	-	-
4143	-	-	-	-	12.0	SB0	-	-
4151	-	-	-	-	11.2	Sa	-	-



FIELD No. 216  
 $12^{\text{h}}35^{\text{m}} + 41^{\circ}30'$   
 Survey Plate No. 115

GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	°	'	"	
16929	12	22	30.2	+	43	07 52	7.03
16948	12	23	23.4	+	39	17 45	5.22
16978	12	25	06.2	+	41	37 54	6.85
17221	12	36	22.1	+	41	08 58	6.29
17332	12	42	11.9	+	43	24 00	7.19
17337	12	42	37.7	+	39	33 01	5.97



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1219.7 + 3833	medium compact	67	1.6	VD	49
1219.7 + 4042	medium compact	230	2.3	ED	45
1219.9 + 4206	open	202	8.7	MD	30
1221.9 + 4347	open	118	5.6	MD	29
1222.7 + 4026	medium compact	109	2.1	VD	47
1226.0 + 4334	open	98	3.9	VD	28
1228.4 + 4105	medium compact	144	5.0	D	44
1228.9 + 4034	medium compact	75	1.1	ED	46
1229.3 + 4225	medium compact	105	1.3	ED	21
1229.5 + 4153	medium compact	154	3.5	VD	27
1230.0 + 4314	medium compact	82	1.1	ED	23
1230.2 + 4350	open	83	3.9	D	24
1230.6 + 4020	medium compact	116	1.7	ED	43
1231.4 + 3954	open	161	6.0	MD	42
1231.7 + 4250	medium compact	129	4.4	D	20
1231.7 + 4407	medium compact	64	0.8	ED	25
1232.2 + 4220	compact	170	1.8	ED	31
1232.6 + 4354	medium compact	100	1.3	ED	26
1232.8 + 4130	medium compact	289	3.0	VD	41
1232.8 + 4414	medium compact	88	1.4	ED	22
1233.1 + 4200	medium compact	53	1.2	VD	40
1233.6 + 3825	compact	70	1.4	ED	48
1234.1 + 4032	medium compact	86	1.3	ED	38
1234.6 + 4148	compact	100	1.1	ED	39
1235.0 + 3852	compact	93	1.6	ED	37
1235.4 + 4322	medium compact	84	1.1	ED	19
1236.4 + 4049	compact	144	2.1	ED	36
1236.8 + 4149	medium compact	150	4.4	MD	32
1237.0 + 4429	compact	105	1.1	ED	6
1237.6 + 4330	compact	95	0.9	ED	18
1237.9 + 4248	medium compact	119	5.5	MD	15
1238.0 + 4305	medium compact	149	1.8	ED	17
1239.6 + 3832	medium compact	218	2.9	VD	34
1239.8 + 4429	medium compact	95	1.6	VD	5
1240.4 + 3956	open	132	6.7	MD	35
1243.2 + 4143	open	139	10.6	Near	14
1244.5 + 4100	compact	98	1.1	ED	11
1245.1 + 4133	medium compact	155	1.8	ED	10
1245.4 + 4031	medium compact	74	2.2	VD	16
1246.0 + 3924	medium compact	107	4.5	D	33
1246.0 + 4427	open	56	1.1	ED	4
1246.1 + 4344	medium compact	88	2.1	ED	8
1246.8 + 4121	medium compact	132	3.7	VD	9
1248.8 + 4039	open	123	5.5	MD	12
1248.8 + 4230	medium compact	133	1.8	ED	7
1248.9 + 3908	medium compact	93	1.3	ED	3
1250.5 + 4001	medium compact	70	0.8	ED	13
1250.7 + 4136	medium compact	100	1.8	ED	2
1252.4 + 4326	medium compact	97	2.1	VD	1

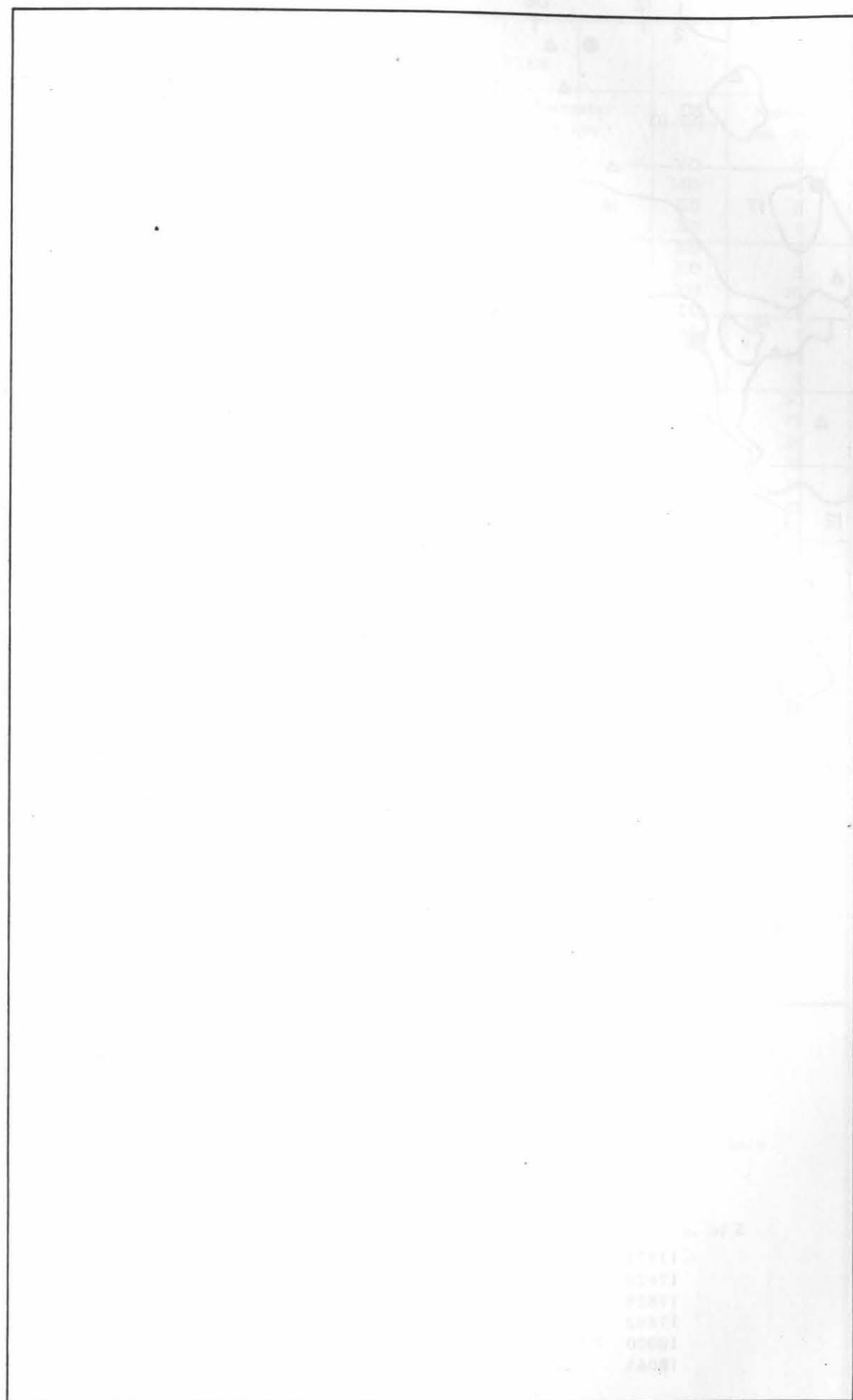
Average number of galaxies per cluster = 117.2

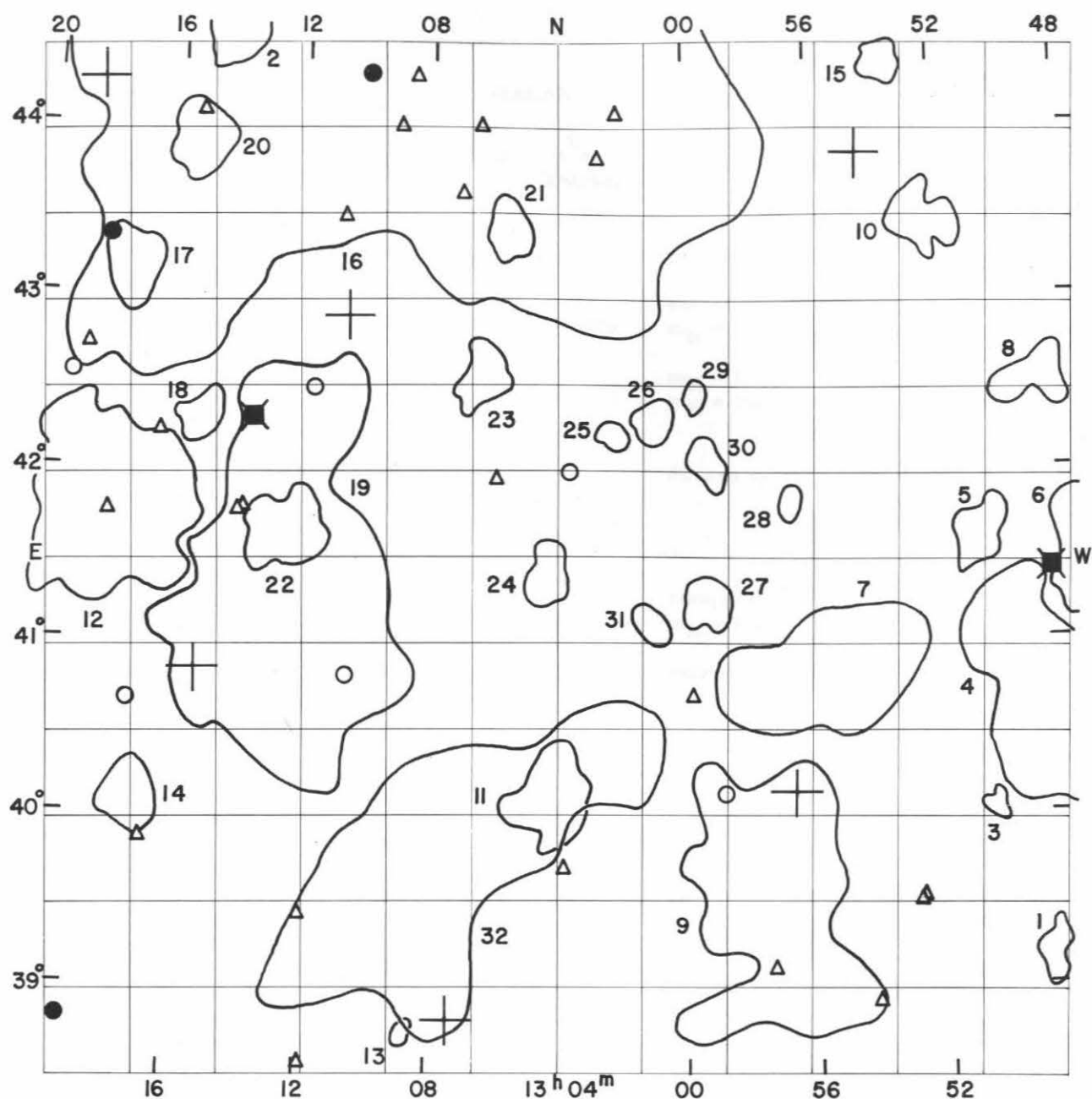
## GALAXIES

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
12	19.1	+	41 08		14.2		
12	22.1	+	39 40	4369	12.3		$m_H = 12.4$ E
12	25.2	+	40 26		15.0		
12	25.2	+	43 46		14.7		extremely diffuse
12	25.8	+	44 22	4449	10.0	+ 206	$m_H = 10.3$ I
12	26.3	+	43 55		15.5		
12	28.0	+	41 59	4485	12.4		$m_H = 12.9$ I
12	28.1	+	41 55	4490	10.1	+ 625	$m_H = 10.5$ Sc
12	29.5	+	40 07		13.9		
12	30.0	+	42 59		13.7		
12	31.5	+	39 18		15.4		diffuse spiral
12	31.6	+	43 42		15.2		
12	33.4	+	38 40		15.1		
12	33.9	+	40 17		15.2		
12	34.5	+	40 38		15.3		
12	35.9	+	42 29		15.6		compact
12	39.1	+	41 26	4618	11.5	+ 484	$m_H = 11.5$ I
12	39.5	+	41 34	4625=3675*	13.0		
12	39.7	+	38 46	3687*	15.5		extremely diffuse
12	39.9	+	42 48		15.6		
12	41.2	+	41 18	4655	15.3		
12	41.5	+	41 01		15.7		
12	41.6	+	41 27	3713*	15.5		
12	42.1	+	41 01	3723*	15.7		
12	42.3	+	40 58	3726*	15.6		
12	43.5	+	41 03	3758*	15.5		
12	44.1	+	41 06		15.7		
12	44.6	+	40 53	3778*	15.6		extremely faint jets
12	45.0	+	40 51	3783*	15.6		
12	45.6	+	41 00	3795*	15.7		
12	46.3	+	42 12	4704	14.8		
12	46.5	+	40 52	3808*	15.7		
12	47.1	+	41 58		15.3		
12	48.5	+	41 23	4736	8.7	+ 298	$m_H = 9.0$ Sb

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4449	9.2	Irr.	-	-	9.8	Irr.	9.90	Irr. I
4485	-	-	-	-	-	-	12.24	Sc+
4490	9.7	Sc	-	-	10.0	Sc	10.09	Sc+
4618	11.4	Irr.	-	-	-	Scp	11.08	Sc+
4625	-	-	-	-	-	-	12.82	Sc+
4736	8.4	Sb	-	-	8.7	Sb	8.91	Sb-





FIELD No. 217

13<sup>h</sup>04<sup>m</sup> + 41°30'

Survey Plate No. 133

# GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	o	'	"	
17572	12	54	20.3	+	43	49 20	6.95
17620	12	56	37.1	+	40	06 49	6.78
17829	13	07	24.1	+	38	47 59	6.22
17892	13	10	34.9	+	42	53 29	6.91
18000	13	15	18.2	+	40	50 07	4.66
18063	13	18	40.0	+	44	15 05	6.58

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1246.8 + 4121	medium compact	132	3.7	VD	6
1248.8 + 4039	open	123	5.5	MD	4
1248.8 + 4230	medium compact	133	1.8	ED	8
1248.9 + 3908	medium compact	93	1.3	ED	1
1250.5 + 4001	medium compact	70	0.8	ED	3
1250.7 + 4136	medium compact	100	1.8	ED	5
1252.4 + 4326	medium compact	97	2.1	VD	10
1253.5 + 4421	compact	109	1.3	ED	15
1255.7 + 4047	open	119	5.2	MD	7
1256.7 + 4147	compact	50	0.9	ED	28
1257.3 + 3925	medium compact	160	6.8	Near	9
1259.3 + 4201	medium compact	72	1.3	ED	30
1259.4 + 4113	compact	93	1.6	ED	27
1259.6 + 4226	compact	45	0.8	VD	29
1300.9 + 4216	medium compact	63	1.3	ED	26
1301.1 + 4105	compact	63	1.1	ED	31
1302.1 + 4211	compact	48	0.9	ED	25
1304.1 + 4005	medium compact	100	2.7	MD	11
1304.3 + 4123	medium compact	72	1.6	ED	24
1305.5 + 4322	compact	74	1.6	ED	21
1306.3 + 4232	compact	70	1.7	VD	23
1307.0 + 3944	compact	355	8.6	Near	32
1308.3 + 4456	medium compact	477	20.3	Near	16
1308.7 + 3843	compact	38	0.6	ED	13
1312.3 + 4115	open	208	9.2	Near	19
1312.5 + 4139	compact	138	2.5	ED	22
1314.4 + 4432	medium compact	123	2.1	VD	2
1315.2 + 4216	compact	84	1.4	ED	18
1315.5 + 4354	medium compact	116	2.1	D	20
1317.2 + 4005	medium compact	86	2.0	ED	14
1317.5 + 4310	compact	147	2.1	VD	17
1318.0 + 4146	medium compact	322	5.7	D	12

Average number of galaxies per cluster = 124.4

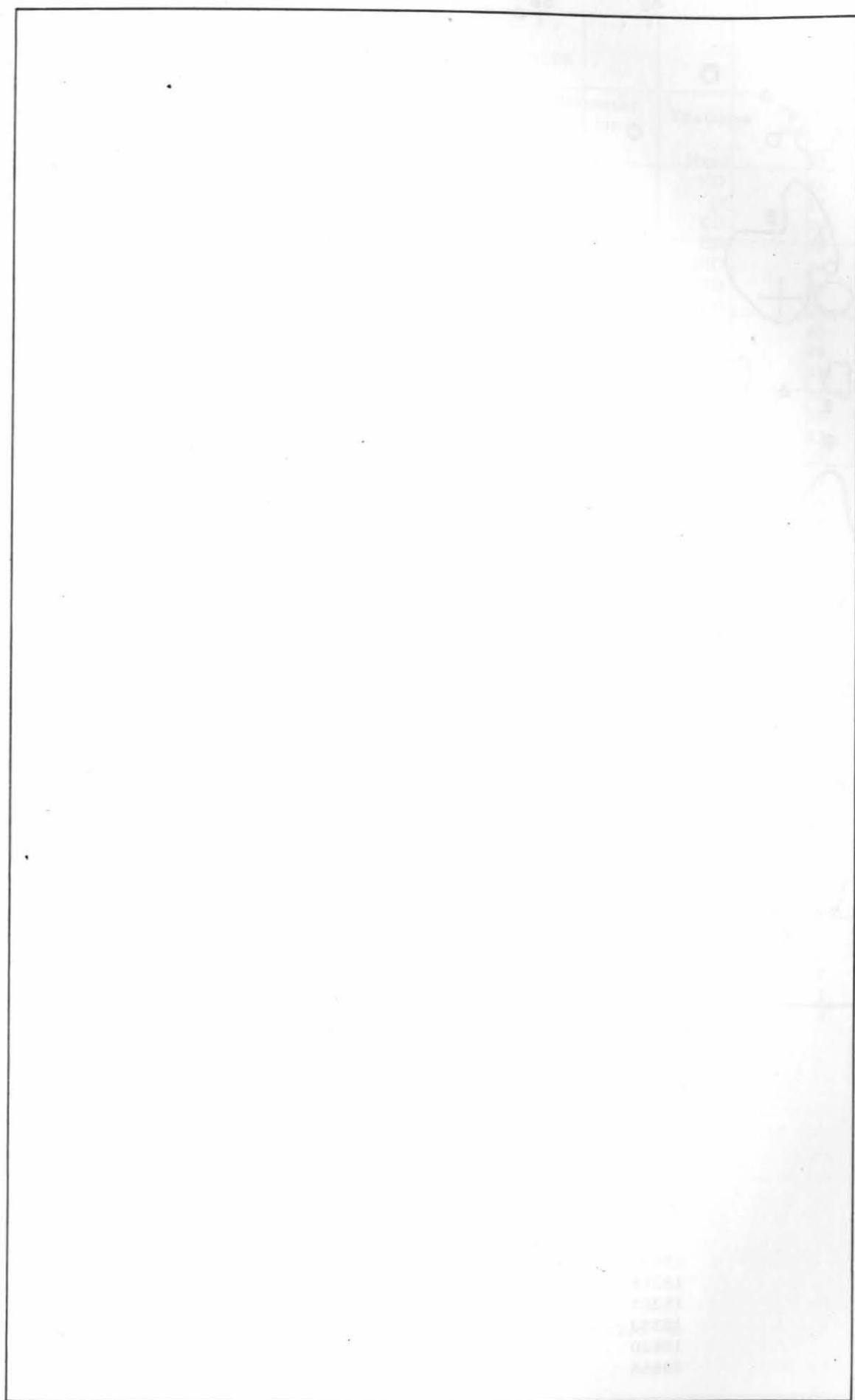
## GALAXIES

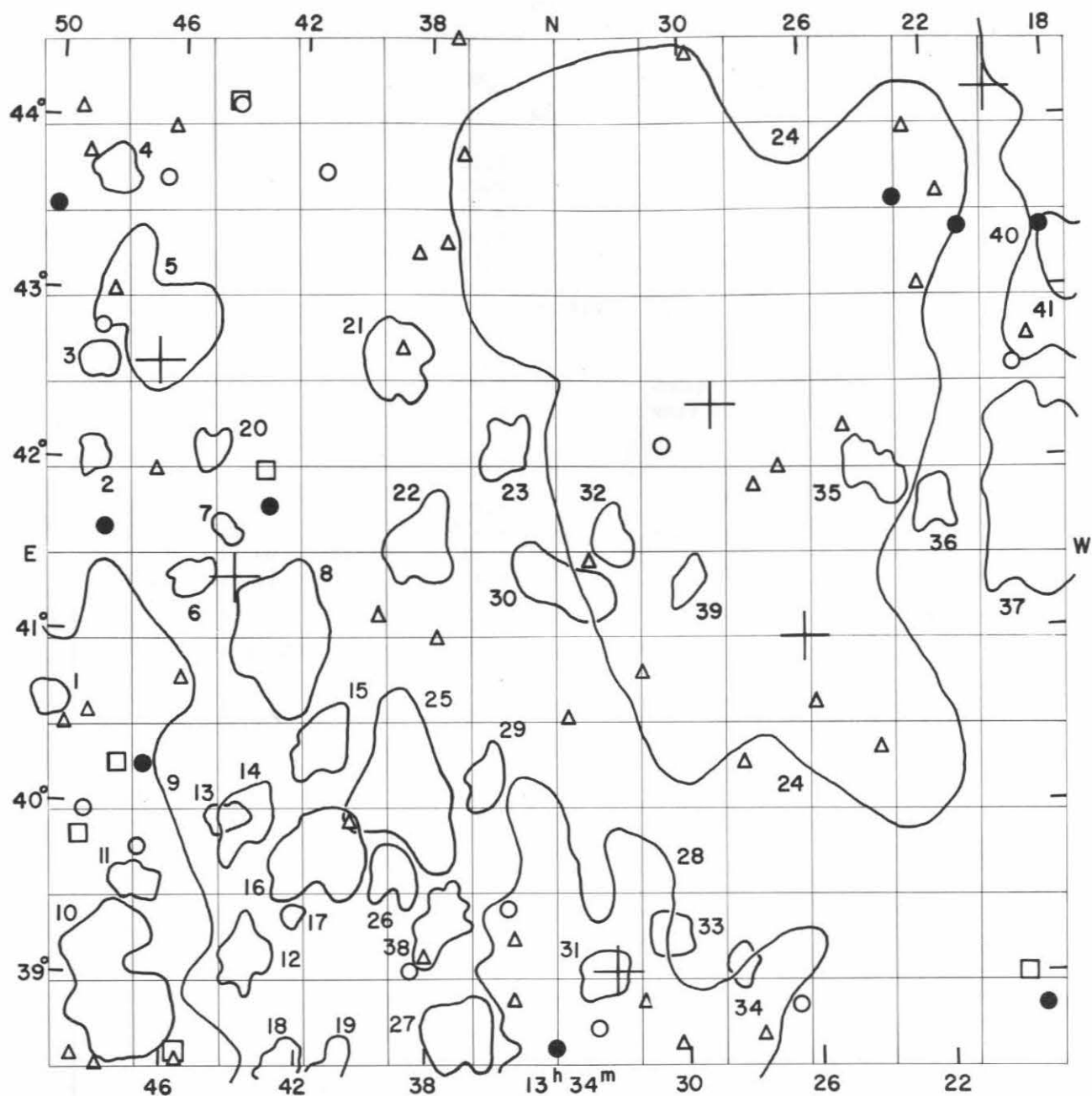
Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
12	48.5	+ 41	23	4736	8.7	+ 298	m <sub>H</sub> = 9.0 Sb
12	52.8	+ 39	30	3892*	15.7		
12	52.9	+ 39	28	3895*	15.7		
12	54.2	+ 38	53	3916*	15.6		
12	57.4	+ 39	05	4003*+4004*	15.4		double system, faint halo
12	58.8	+ 40	07	4062*	15.0		
12	59.7	+ 40	41	4100*	15.1		
13	02.1	+ 44	05		15.5		
13	02.7	+ 43	49		15.7		double nucleus, p. of 2
13	03.6	+ 41	59	4963	14.2		
13	03.8	+ 39	42	4193*	15.6		
13	05.9	+ 41	57	4985	15.1		
13	06.4	+ 44	00		15.3		
13	07.0	+ 43	36		15.7		compact
13	08.5	+ 44	17		15.3		
13	09.0	+ 44	00		15.7		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	i				
13	10.0	+44	18	5023	13.2		
13	10.6	+40	48		15.0		
13	10.8	+43	27		15.6		
13	11.6	+42	28		14.9		
13	11.8	+38	33		15.1		triple system
13	11.9	+39	24		15.6		double system, bridge + jets
13	13.5	+42	17	5055	9.7	+ 519	$m_H = 10.5$ Sb
13	13.8	+41	45		15.2		
13	14.0	+41	45		15.4		
13	15.4	+44	04		15.5		compact
13	16.5	+42	12		15.5		very diffuse spiral
13	16.8	+39	52	5083	15.4		
13	17.4	+40	39	5093	14.8		
13	18.1	+41	44		15.7		
13	18.3	+43	20	5103	13.6		
13	18.8	+42	43		15.5		compact
13	19.1	+38	48	5107	13.7		
13	19.4	+42	32		14.5		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4736	8.4	Sb	-	-	8.7	Sb	8.91	Sb-
5055	9.4	Sb	-	-	9.0	Sb	9.26	Sb+





FIELD No. 218

$13^{\text{h}}34^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 154

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
18094	13	19	52.8	+	44	09 51	6.41
18218	13	26	13.9	+	40	59 20	6.54
18283	13	29	05.7	+	42	21 46	6.15
18352	13	32	09.3	+	39	02 40	6.21
18620	13	44	06.2	+	41	20 20	5.69
18668	13	46	37.0	+	42	35 11	7.02



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1308.3 + 4456	medium compact	477	20.3	Near	40
1317.5 + 4310	compact	147	2.1	VD	41
1318.0 + 4146	medium compact	322	5.7	D	37
1322.0 + 4145	compact	128	1.5	ED	36
1323.9 + 4157	compact	205	1.8	ED	35
1328.2 + 4215	open	390	18.6	MD	24
1328.3 + 3905	medium compact	66	1.1	VD	34
1329.9 + 4119	medium compact	82	1.2	ED	39
1330.5 + 3915	medium compact	107	1.4	VD	33
1331.7 + 3805	open	365	12.4	MD	28
1332.2 + 4134	medium compact	119	1.5	ED	32
1332.5 + 3901	medium compact	105	1.5	ED	31
1333.7 + 4117	compact	320	2.3	ED	30
1335.6 + 4206	medium compact	100	1.7	ED	23
1336.1 + 4010	open	120	1.6	ED	29
1337.0 + 3840	medium compact	266	2.2	ED	27
1337.5 + 3920	medium compact	151	1.9	VD	38
1338.4 + 4132	medium compact	142	2.2	ED	22
1338.6 + 4010	compact	419	3.8	VD	25
1339.0 + 3938	compact	134	1.7	ED	26
1339.0 + 4236	open	136	2.2	VD	21
1340.9 + 3827	medium compact	117	1.4	ED	19
1341.2 + 4022	medium compact	232	2.0	ED	15
1341.3 + 3943	medium compact	321	2.9	ED	16
1342.1 + 3921	compact	59	0.6	ED	17
1342.4 + 3826	compact	176	1.6	VD	18
1342.5 + 4100	compact	95	3.7	VD	8
1343.5 + 3906	medium compact	153	1.8	ED	12
1343.6 + 3955	medium compact	59	1.9	VD	14
1344.1 + 3955	compact	94	1.2	ED	13
1344.4 + 4136	compact	70	0.8	ED	7
1344.9 + 4204	medium compact	67	1.2	ED	20
1345.3 + 4120	compact	94	1.3	ED	6
1346.6 + 4250	open	80	3.9	VD	5
1346.9 + 3931	medium compact	88	1.3	VD	11
1347.4 + 3855	medium compact	110	4.0	D	10
1348.2 + 4342	medium compact	64	1.4	VD	4
1348.5 + 4234	compact	83	1.3	ED	3
1348.6 + 4201	compact	72	1.1	ED	2
1349.6 + 4035	open	60	1.2	ED	1
1352.9 + 3856	medium compact	310	22.1	Near	9

Average number of galaxies per cluster = 163.5

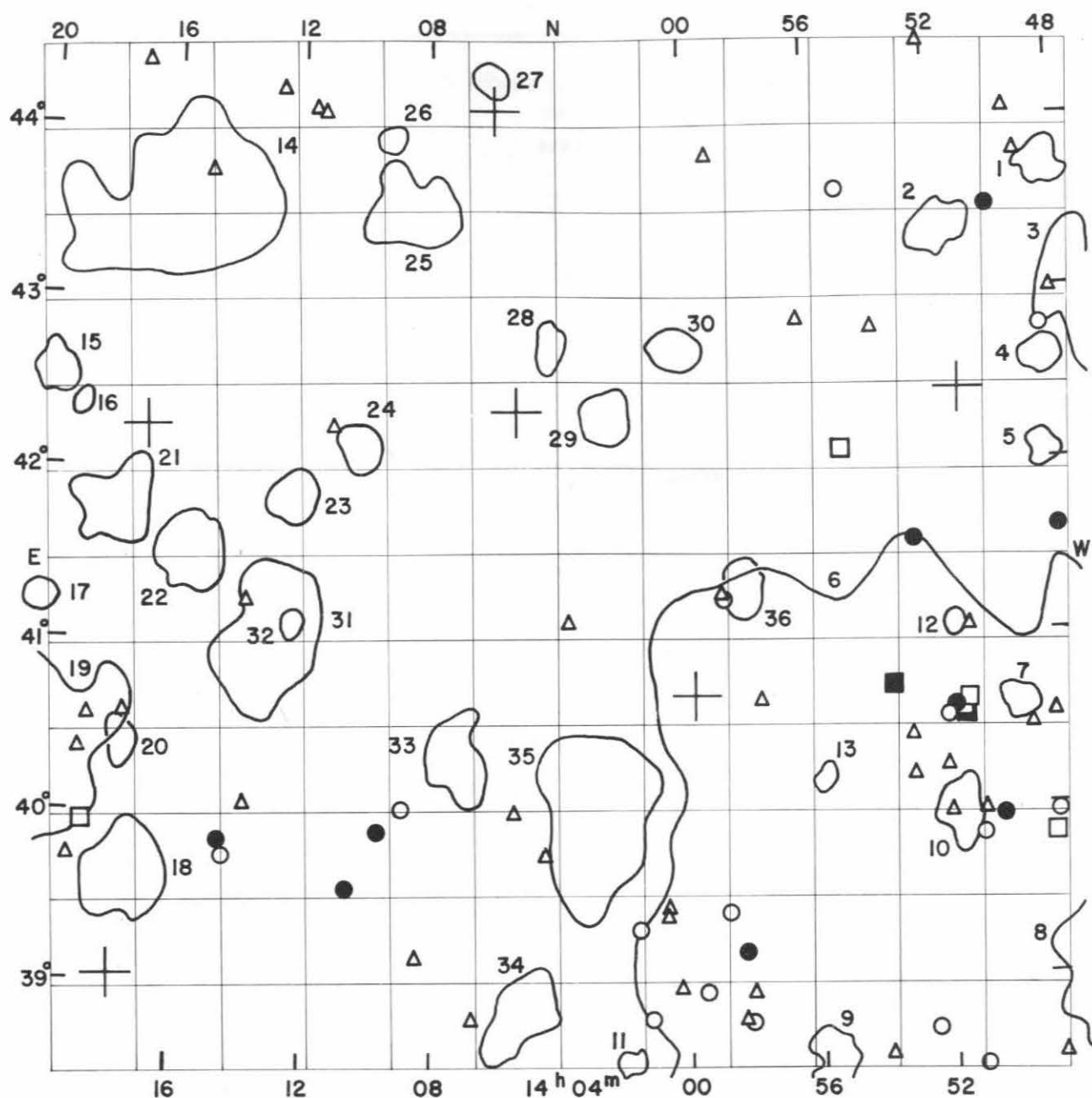
## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
13	18.3	+43 20	5103	13.6		
13	18.8	+42 43		15.5		compact
13	19.1	+38 48	5107	13.7		
13	19.4	+42 32		14.5		
13	19.7	+39 00	5112	12.5		m <sub>H</sub> = 12.6 S
13	21.0	+43 20	5123	13.5		
13	21.6	+43 33		15.7		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
13	22.3	+43	01		15.6		
13	22.6	+43	56		15.5		diffuse spiral
13	23.0	+43	31	5145	13.6		
13	23.9	+40	20		15.5		
13	24.9	+42	13		15.5		
13	25.9	+40	36		15.7		
13	26.6	+38	50		15.0		double system
13	27.0	+42	00		15.7		
13	27.7	+38	40		15.7		
13	27.8	+41	53		15.6		
13	28.2	+40	15		15.7		
13	29.7	+44	24		15.6		
13	30.2	+38	37		15.6		
13	30.6	+42	08	5214	14.4		double system
13	31.3	+40	47		15.6		
13	31.4	+38	52		15.7		
13	32.7	+38	43		14.7		
13	33.0	+41	27		15.7		
13	33.7	+40	32		15.5		
13	34.0	+38	36	5243	14.0		double system
13	35.3	+38	53		15.1		
13	35.3	+39	14		15.3		
13	35.5	+39	25		14.2		
13	36.9	+43	49		15.4		
13	37.1	+44	30		15.7		
13	37.5	+43	18		15.2		
13	37.8	+41	00		15.3		
13	38.0	+39	07		15.2		
13	38.4	+39	02	5267	14.3		double system
13	38.4	+43	15		15.4		
13	38.8	+42	41		15.1		
13	39.5	+41	08		15.5		very diffuse spiral
13	40.4	+39	55		15.7		extremely diffuse
13	41.4	+43	43		14.8		
13	43.0	+41	45	5289	13.5		
13	43.1	+41	58	5290	13.0		
13	44.2	+44	05	5296	15.0		
13	44.3	+44	07	5297	12.3	$m_H = 13.0$	
13	45.6	+38	30		15.3		
13	45.6	+38	33	5303	12.9		
13	45.6	+40	44		15.4		
13	46.3	+43	57		15.7		
13	46.5	+43	39		14.6		
13	46.6	+41	58		15.6		double nucleus
13	46.8	+40	14	5311	13.7		
13	46.9	+39	45		14.3		
13	47.6	+40	14	5313	12.4	$m_H = 13.0$	
13	48.0	+38	28		15.4	compact	
13	48.2	+41	37	5320	13.1		
13	48.2	+42	59		15.5		
13	48.5	+42	47		14.5		
13	48.6	+39	57	4336*	14.6		
13	48.6	+40	31		15.2		
13	48.7	+39	49	5326	12.9	$m_H = 13.1$	
13	48.8	+38	31	5325	15.1		
13	49.1	+43	47		15.6		
13	49.3	+40	27		15.4	compact	
13	49.4	+44	03		15.2		
13	50.1	+43	29	5336	13.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5297	12.5	Sc	-	-	-	-	-	-



FIELD No. 219

$14^{\text{h}}04^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 1386

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	i	"	
18778	13	51	15.8	+	42	25 49	6.69
18960	13	59	44.4	+	40	39 38	6.96
19071	14	05	19.0	+	42	20 09	7.26
19084	14	05	55.9	+	44	05 30	5.44
19322	14	16	57.5	+	42	14 07	7.20
19341	14	17	44.5	+	39	01 23	5.98

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1346.6 + 4250	open	80	3.9	VD	3
1347.4 + 3855	medium compact	110	4.0	D	8
1348.2 + 4342	medium compact	64	1.4	VD	1
1348.5 + 4234	compact	83	1.3	ED	4
1348.6 + 4201	compact	72	1.1	ED	5
1349.6 + 4035	open	60	1.2	ED	7
1351.5 + 4103	compact	37	0.7	ED	12
1351.6 + 3957	medium compact	123	1.7	ED	10
1351.7 + 4320	medium compact	114	1.8	VD	2
1352.9 + 3856	medium compact	310	22.1	Near	6
1355.7 + 4010	compact	49	0.7	ED	13
1355.9 + 3827	medium compact	71	1.8	VD	9
1358.1 + 4117	compact	88	1.5	ED	36
1400.2 + 4241	medium compact	95	1.5	ED	30
1401.9 + 3829	compact	47	0.8	ED	11
1402.5 + 4217	open	86	1.6	ED	29
1402.8 + 3954	medium compact	94	4.5	D	35
1404.3 + 4241	medium compact	56	1.1	VD	28
1405.2 + 3847	medium compact	101	2.4	VD	34
1406.0 + 4415	compact	63	1.0	ED	27
1407.1 + 4017	medium compact	128	2.3	ED	33
1408.7 + 4330	medium compact	136	2.5	VD	25
1409.2 + 4355	compact	62	0.8	ED	26
1410.1 + 4206	compact	94	1.5	ED	24
1412.2 + 4149	medium compact	86	1.6	ED	23
1412.3 + 4105	compact	48	0.7	ED	32
1413.0 + 4100	medium compact	134	3.8	D	31
1415.5 + 4130	compact	151	2.2	ED	22
1416.3 + 4331	medium compact	190	5.6	MD	14
1417.4 + 3936	medium compact	181	2.8	MD	18
1417.6 + 4024	compact	69	1.1	ED	20
1418.0 + 4145	medium compact	196	2.3	ED	21
1419.0 + 4221	compact	51	0.6	ED	16
1419.8 + 4232	compact	95	1.4	ED	15
1420.3 + 4113	medium compact	56	1.1	ED	17
1420.7 + 4025	medium compact	145	6.2	Near	19

Average number of galaxies per cluster = 100.7

## GALAXIES

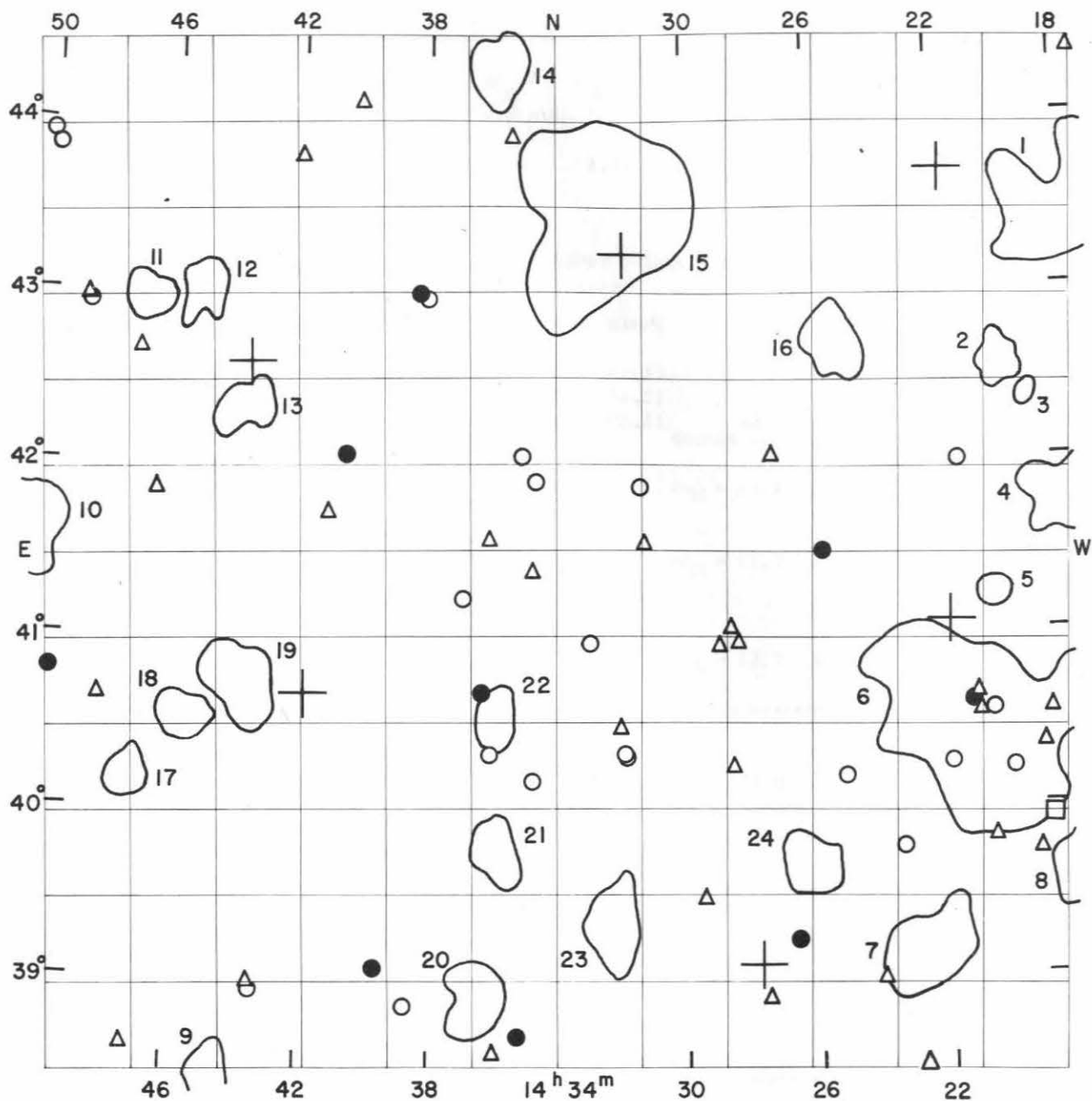
Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
13	48.2	+41 37	5320	13.1		
13	48.2	+42 59		15.5		
13	48.5	+42 47		14.5		
13	48.6	+39 57	4336*	14.6		
13	48.6	+40 31		15.2		
13	48.7	+39 49	5326	12.9		$m_H = 13.1$
13	48.8	+38 31	5325	15.1		
13	49.1	+43 47		15.6		
13	49.3	+40 27		15.4		compact
13	49.4	+44 03		15.2		
13	50.1	+43 29	5336	13.6		
13	50.3	+39 56	5337	13.4		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
13	50.9	+39	58		15.6		
13	51.0	+39	49	5346	14.9		
13	51.1	+38	28		15.0		
13	51.1	+41	02		15.4		
13	51.3	+40	36	5350	12.4		$m_H = 12.9$ S
13	51.4	+40	31	5353	11.8	+2188	$m_H = 12.4$
13	51.4	+40	32	5354	12.3		
13	51.6	+40	35	5355	14.0		
13	51.9	+39	57		15.7		
13	51.9	+40	31	5358	14.6		
13	52.0	+40	13		15.3		
13	52.1	+44	27		15.4		double system
13	52.5	+38	41	5361	14.7		
13	52.8	+41	33	5362	13.2		$m_H = 13.2$
13	53.0	+40	10		15.3		
13	53.0	+40	24		15.1		
13	53.5	+40	42	5371	11.5	+2592	$m_H = 11.7$ S
13	53.9	+42	47		15.7		
13	54.0	+38	32		15.3		
13	54.9	+43	35		15.0		
13	55.0	+42	05	5383	12.5		$m_H = 12.7$ SBc
13	56.3	+42	51		15.6		
13	57.6	+40	37		15.1		double system
13	58.0	+38	55		15.3		
13	58.1	+38	44		15.0		
13	58.2	+39	09	5406	13.1		$m_H = 13.0$
13	58.3	+38	45		15.4		
13	58.7	+39	23	5407	14.5		
13	58.7	+41	14	5410	14.1		
13	58.8	+41	15		15.4		
13	59.2	+43	49		15.7		
13	59.5	+38	55		14.7		
14	00.3	+38	57		15.7		
14	00.6	+39	24		15.2		
14	00.7	+39	22		15.7		
14	01.2	+38	46		14.2		
14	01.5	+39	17		14.4		
14	03.6	+41	05		15.7		very diffuse spiral
14	04.4	+39	44		15.3		
14	05.3	+39	59		15.3		
14	06.7	+38	46		15.5		
14	08.4	+39	07	5497	15.1		
14	08.8	+40	00		14.9		
14	09.5	+39	53		13.9		
14	10.5	+39	32	5515	13.7		
14	11.0	+42	14		15.5		
14	11.4	+44	05		15.6		
14	11.6	+44	06		15.1		
14	12.7	+44	12		15.7		
14	13.7	+41	13		15.5		
14	13.8	+40	01	990*	15.4		
14	14.3	+39	44	5536	14.5		
14	14.4	+39	49	5541	13.4		
14	15.0	+43	44		15.6		
14	17.2	+44	22		15.7		
14	17.5	+40	33		15.4		
14	18.6	+40	33		15.5		
14	18.7	+39	56	5582	13.0		
14	18.9	+40	21		15.5		very compact

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
14	19.1	+ 39	44		15.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5353	-	-	12.14	S0	12.1	S0	-	-
5354	-	-	12.48	S0	-	-	-	-
5371	11.2	Sc	11.59	Sb	11.4	Sb	-	-



FIELD No. 220

$14^{\text{h}} 34^{\text{m}}$   $+ 41^{\circ} 30'$

Survey Plate No. 145

GC STARS

Nos.	R.A.			Decl.			$m_p$	
	h	m	s		°	'	"	
19421	14	21	37.2	+	43	41	05	7.58
19429	14	21	42.3	+	41	04	11	6.65
19554	14	27	44.2	+	39	04	59	Var.
19645	14	31	49.7	+	43	13	33	6.82
19841	14	41	48.0	+	40	40	12	5.79
19881	14	43	36.4	+	42	35	28	7.24



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1416.3 + 4331	medium compact	190	5.6	MD	1
1417.4 + 3936	medium compact	181	2.8	MD	8
1418.0 + 4145	medium compact	196	2.3	ED	4
1419.0 + 4221	compact	51	0.6	ED	3
1419.8 + 4232	compact	95	1.4	ED	2
1420.3 + 4113	medium compact	56	1.1	ED	5
1420.7 + 4025	medium compact	145	6.2	Near	6
1422.6 + 3908	compact	178	2.8	VD	7
1425.1 + 4241	medium compact	103	2.0	VD	16
1426.1 + 3938	compact	78	1.9	ED	24
1432.2 + 3919	open	102	2.2	ED	23
1432.5 + 4325	open	138	5.6	D	15
1435.8 + 3944	medium compact	104	1.7	VD	21
1435.9 + 4030	compact	102	1.5	ED	22
1435.9 + 4417	medium compact	78	2.0	ED	14
1436.4 + 3852	medium compact	47	2.2	ED	20
1443.7 + 4217	medium compact	129	1.7	ED	13
1443.8 + 4043	compact	97	2.3	VD	19
1444.2 + 3820	medium compact	109	2.0	ED	9
1445.0 + 4259	compact	95	1.6	ED	12
1445.4 + 4031	medium compact	81	1.6	ED	18
1446.8 + 4255	medium compact	91	1.6	ED	11
1447.2 + 4010	compact	80	1.4	ED	17
1451.0 + 4135	medium compact	118	3.1	VD	10

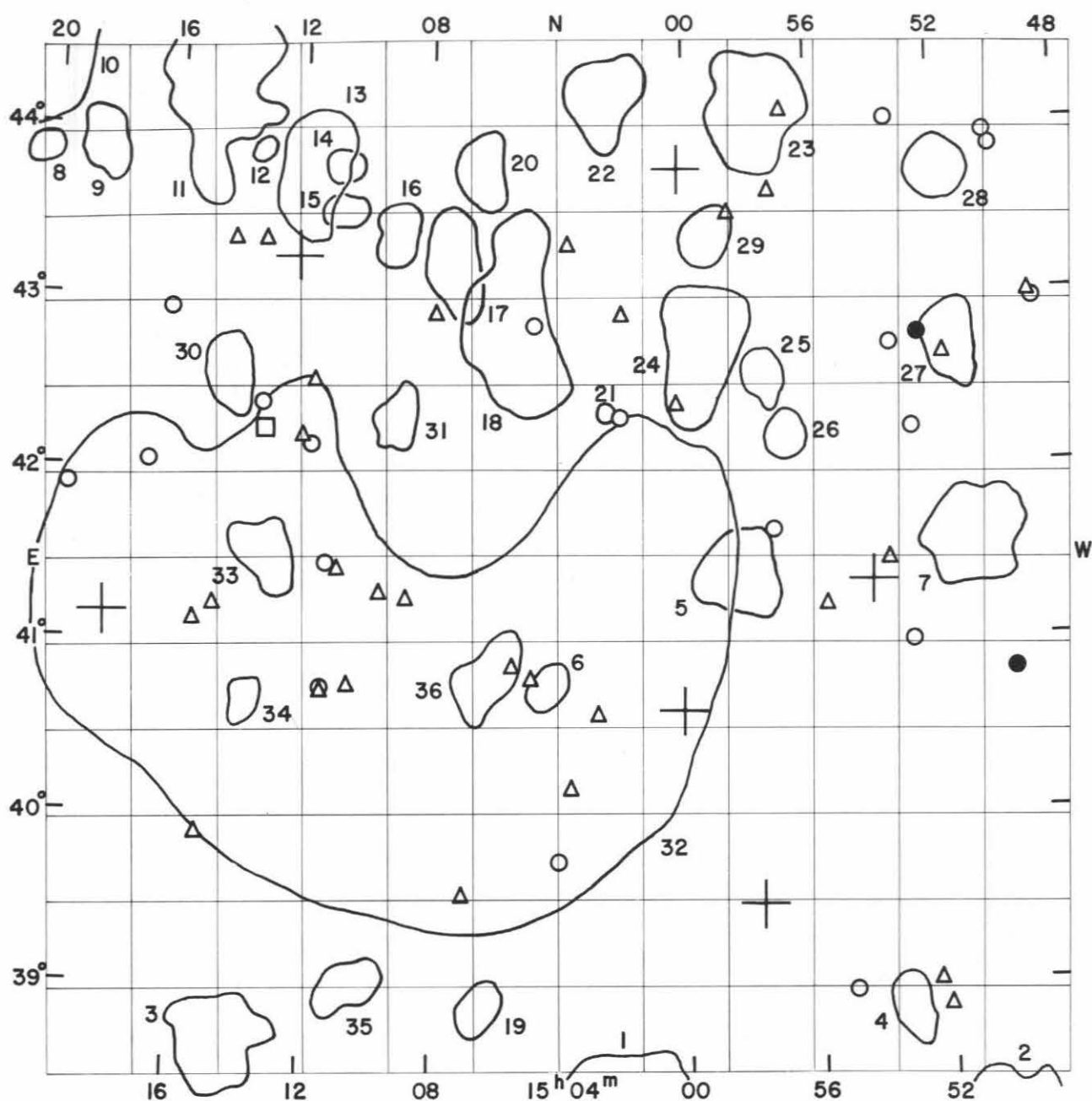
Average number of galaxies per cluster = 110.2

## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
14	17.2	+ 44	22		15.7		
14	18.6	+ 40	33		15.5		
14	18.7	+ 39	56	5582	13.0		
14	18.9	+ 40	21		15.5		very compact
14	19.1	+ 39	44		15.6		
14	19.9	+ 40	13		15.0		
14	20.5	+ 40	33	5598	14.3		
14	20.6	+ 39	49		15.5		
14	20.9	+ 40	32	5601	15.6		
14	21.0	+ 40	39		15.1		diffuse
14	21.1	+ 40	36	5603	14.0		
14	21.3	+ 42	00	5608	14.3		
14	21.7	+ 40	15		14.7		
14	22.8	+ 38	28		15.2		
14	23.3	+ 39	45		14.8		
14	24.0	+ 39	00		15.5		
14	25.0	+ 40	11	5625	14.8		
14	25.6	+ 41	29	5630	13.6		
14	26.6	+ 39	13		14.0		
14	27.1	+ 42	03		15.3		
14	27.5	+ 38	53		15.5		
14	28.3	+ 40	57		15.7		
14	28.5	+ 40	15		15.5		
14	28.5	+ 41	02		15.6		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ o ' "					
14	29.0	+ 40 56			15.7		
14	29.5	+ 39 29			15.4		
14	31.2	+ 41 32			15.6		
14	31.3	+ 41 52	1028*		14.8		
14	31.8	+ 40 17			15.0		
14	31.8	+ 40 18			14.8		
14	32.0	+ 40 28			15.6		
14	32.9	+ 40 58			14.9		
14	34.6	+ 41 54	5697=4471*		14.6		
14	34.7	+ 40 10			15.0		
14	34.7	+ 41 22			15.6		
14	35.0	+ 42 02	5696		14.1		
14	35.2	+ 38 40	5698		14.0		
14	35.3	+ 43 55			15.4		
14	36.0	+ 38 35			15.6		double system
14	36.0	+ 40 19			14.8		
14	36.0	+ 41 34			15.7		
14	36.3	+ 40 40	5708		13.9		
14	36.9	+ 41 14			14.6		
14	38.0	+ 42 58	5731		14.7		
14	38.3	+ 43 00	5730		14.0		
14	38.6	+ 38 51	5732		14.4		
14	39.5	+ 39 04			13.8		
14	40.1	+ 44 06			15.7		compact
14	40.6	+ 42 03	5739		13.7		$m_H = 13.1$
14	41.1	+ 41 43			15.7		
14	42.0	+ 43 47			15.4		
14	43.3	+ 38 56	5752+5754		14.1		double system
14	43.4	+ 38 59	5753+5755		15.1		double system
14	46.5	+ 41 50			15.7		
14	47.1	+ 42 40			15.3		
14	47.2	+ 38 37			15.4		
14	48.2	+ 40 39			15.6		
14	48.8	+ 42 56			14.6		
14	48.9	+ 42 58			15.5		very compact
14	49.7	+ 40 49	5772		13.9		
14	49.9	+ 43 51			14.9		
14	50.1	+ 43 56			14.4		

1000  
1000  
1000  
1000  
1000  
1000  
1000



FIELD No. 221

$15^{\text{h}}04^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 1371

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
20097	14	54	06.7	+	41	20 14	7.21
20183	14	57	41.9	+	39	27 45	5.58
20226	15	00	03.7	+	40	35 12	3.63
20227	15	00	05.8	+	43	44 13	8.2
20492	15	12	12.5	+	43	13 58	6.55
20627	15	18	13.2	+	41	09 41	6.80

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1450.2 + 3811	compact	224	3.2	ED	2
1451.0 + 4135	medium compact	118	3.1	VD	7
1451.4 + 4241	medium compact	93	2.1	VD	27
1451.6 + 4342	medium compact	122	2.0	VD	28
1453.3 + 3849	compact	109	1.6	ED	4
1456.7 + 4210	medium compact	75	1.4	VD	26
1457.4 + 4232	compact	93	1.5	ED	25
1457.6 + 4404	medium compact	268	3.3	VD	23
1458.2 + 4121	medium compact	65	2.6	D	5
1459.1 + 4319	open	68	1.6	ED	29
1459.4 + 4240	compact	214	3.4	VD	24
1501.8 + 3803	medium compact	218	5.9	D	1
1502.4 + 4219	compact	44	0.5	ED	21
1502.5 + 4408	medium compact	85	2.5	VD	22
1504.3 + 4043	compact	74	1.3	ED	6
1505.4 + 4250	medium compact	141	4.2	D	18
1506.2 + 4046	open	86	2.2	ED	36
1506.4 + 4343	open	105	2.0	VD	20
1506.5 + 3850	compact	71	1.5	ED	19
1507.2 + 4310	compact	240	2.4	ED	17
1508.8 + 4054	open	200	17.9	Near	32
1509.0 + 4216	compact	74	1.5	ED	31
1509.0 + 4320	medium compact	124	1.6	VD	16
1510.4 + 3859	open	76	1.8	ED	35
1510.8 + 4328	medium compact	73	1.2	ED	15
1510.8 + 4345	medium compact	61	1.1	ED	14
1511.7 + 4342	medium compact	149	3.1	VD	13
1513.1 + 4130	medium compact	99	2.1	VD	33
1513.4 + 4351	compact	89	0.7	ED	12
1513.7 + 4038	medium compact	57	1.2	VD	34
1514.2 + 4232	compact	130	2.0	ED	30
1514.3 + 3837	medium compact	158	3.0	MD	3
1514.8 + 4408	open	109	4.2	D	11
1518.6 + 4353	open	98	1.8	VD	9
1520.6 + 4350	medium compact	73	1.1	ED	8
1521.8 + 4410	open	144	4.5	D	10

Average number of galaxies per cluster = 117.4

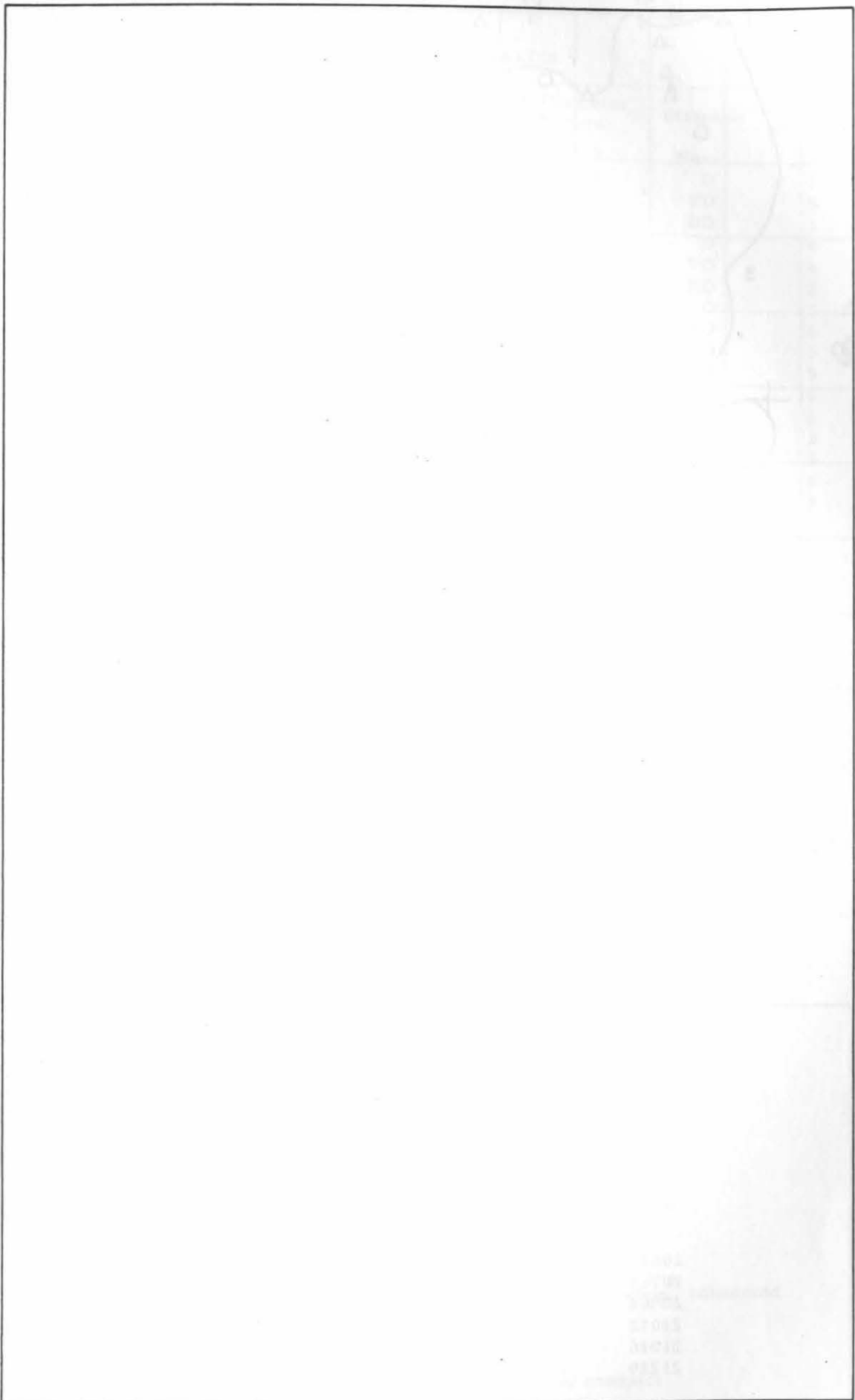
## GALAXIES

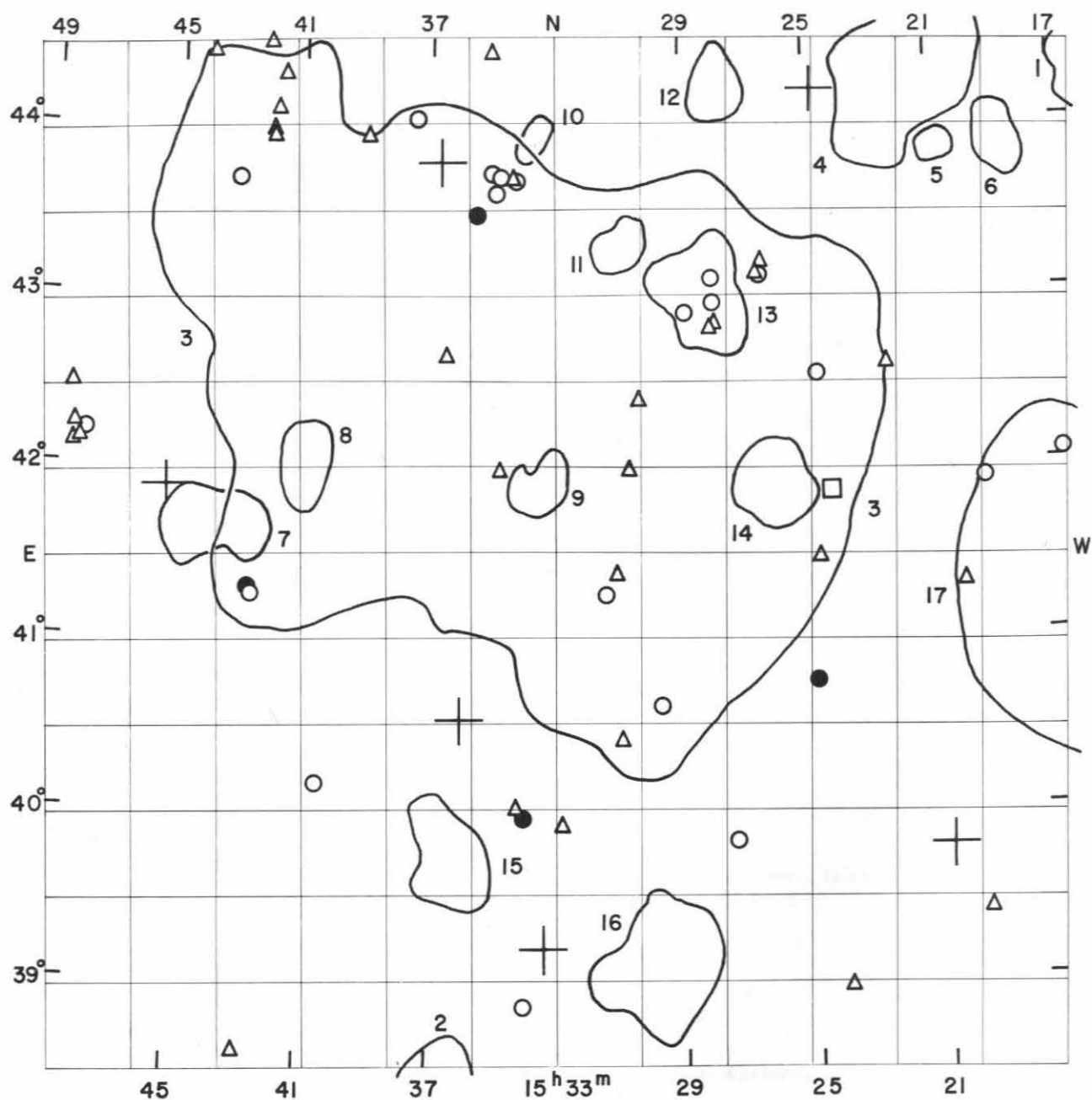
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
14	48.8	+42 56		14.6		
14	48.9	+42 58		15.5		
14	49.7	+40 49	5772	13.9		very compact
14	49.9	+43 51		14.9		
14	50.1	+43 56		14.4		
14	51.7	+42 38		15.7		
14	52.1	+38 51		15.4		
14	52.4	+39 00		15.6		
14	52.4	+42 45	5784	13.7		
14	52.8	+42 13		14.8		
14	52.9	+40 59		15.0		
14	53.3	+44 00		15.0		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
14	53.4	+42	42	5787	14.1		
14	53.6	+41	27		15.2		
14	55.0	+38	56		14.4		
14	55.6	+41	11		15.6		
14	56.8	+44	04		15.3		
14	57.1	+41	38		14.9		
14	57.1	+43	35		15.3		
14	58.5	+43	28		15.4		double system
15	00.2	+42	23		15.6		
15	01.9	+42	53	1090*	15.1		
15	02.0	+42	18		14.8		
15	02.7	+40	34		15.1		
15	03.6	+40	08		15.5		
15	03.6	+43	18		15.7		
15	04.0	+39	43	5853	14.8		
15	04.7	+42	50	5860	14.2		double nebula in halo
15	04.8	+40	46		15.7		compact
15	05.4	+40	51		15.6		diffuse
15	07.0	+39	30		15.6		
15	07.9	+42	54		15.5		
15	08.7	+41	15		15.5		
15	09.5	+41	17		15.2		
15	10.5	+40	45		15.2		compact
15	10.9	+41	25	5886	15.1		
15	11.2	+41	27	5888	14.3		
15	11.3	+40	44		15.0		
15	11.4	+40	43		15.3		
15	11.6	+42	31		15.4		
15	11.7	+42	09	5893	14.1		
15	12.0	+42	11	5895+5896	15.5		double system, faint bridge
15	13.2	+42	14	5899	12.6	+ 2549	$m_H = 12.4$ S
15	13.2	+42	24	5900	15.0		
15	13.3	+43	20		15.2		
15	14.2	+43	20		15.7		
15	14.8	+41	13		15.6		
15	15.1	+39	53		15.1		
15	15.4	+41	08		15.5		
15	16.2	+42	55		14.9		double system, twisted arms
15	16.9	+42	02	5914	14.9		
15	19.4	+41	54	5923	14.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956	Holmberg 1958	
5899	-	-	12.48	Sb	12.5 Sb	-	-





FIELD No. 222

$15^{\text{h}}33^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 1376

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
20690	15	20	46.3	+	39	45 32	5.85
20764	15	24	43.0	+	44	10 40	7.40
20964	15	33	24.8	+	39	10 30	5.44
21032	15	36	01.8	+	40	30 55	5.41
21046	15	36	41.0	+	43	45 58	6.75
21229	15	45	18.3	+	41	52 23	8.1



## CLUSTERS OF GALAXIES

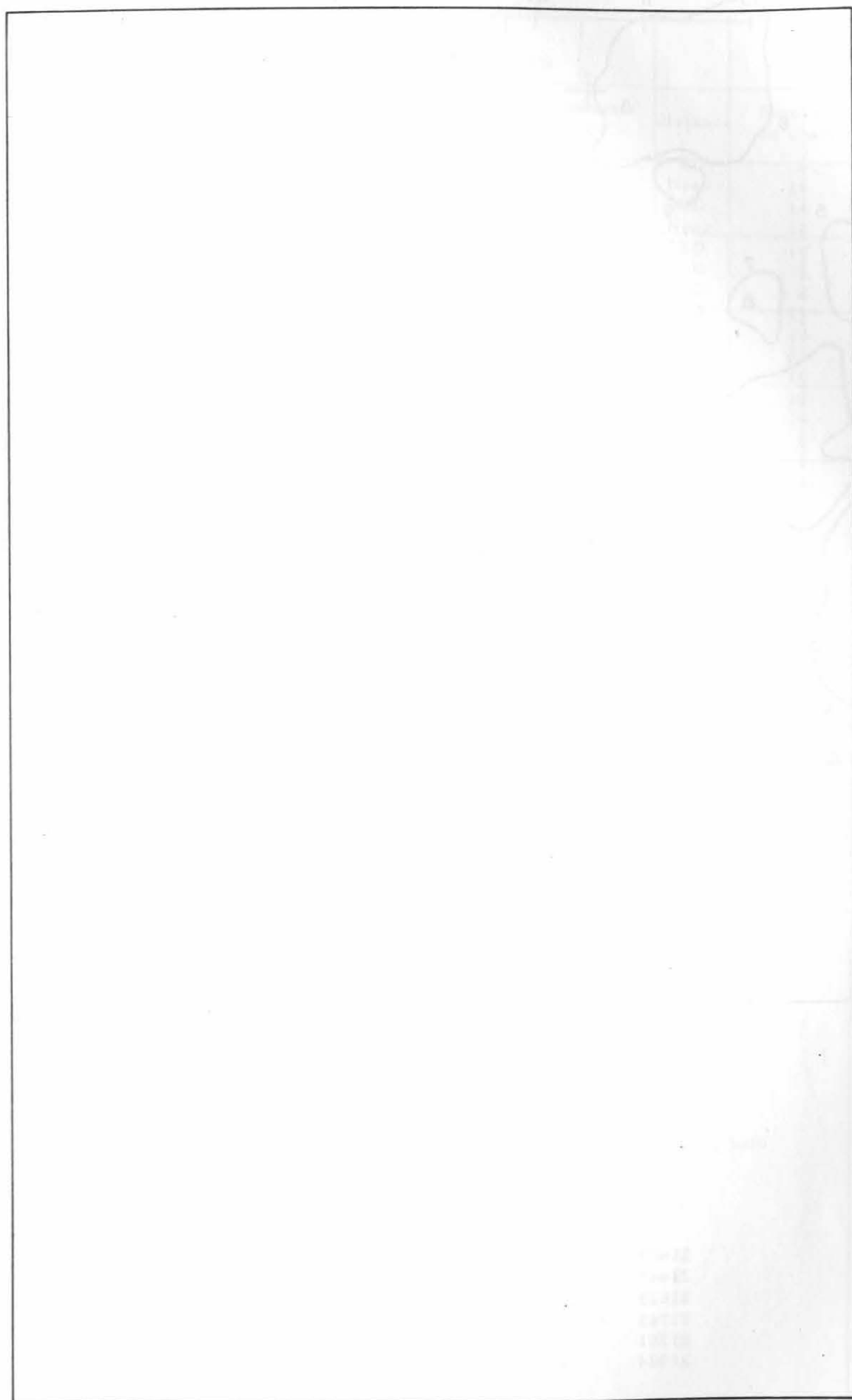
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1508.8 + 4054	open	200	17.9	Near	17
1514.8 + 4408	open	109	4.2	D	1
1518.6 + 4353	open	98	1.8	VD	6
1520.6 + 4350	medium compact	73	1.1	ED	5
1521.8 + 4410	open	144	4.5	D	4
1526.0 + 4153	medium compact	112	2.7	VD	14
1527.8 + 4411	compact	110	2.1	ED	12
1528.2 + 4259	medium compact	86	3.3	D	13
1529.8 + 3903	medium compact	117	4.0	VD	16
1530.9 + 4316	compact	84	1.6	VD	11
1533.5 + 4151	medium compact	78	1.9	ED	9
1533.7 + 4355	medium compact	69	1.1	ED	10
1534.0 + 4222	medium compact	290	21.7	Near	3
1534.7 + 3753	medium compact	126	6.7	D	2
1536.3 + 3941	open	133	3.0	VD	15
1540.9 + 4200	medium compact	147	2.1	D	8
1543.7 + 4139	medium compact	128	2.9	D	7

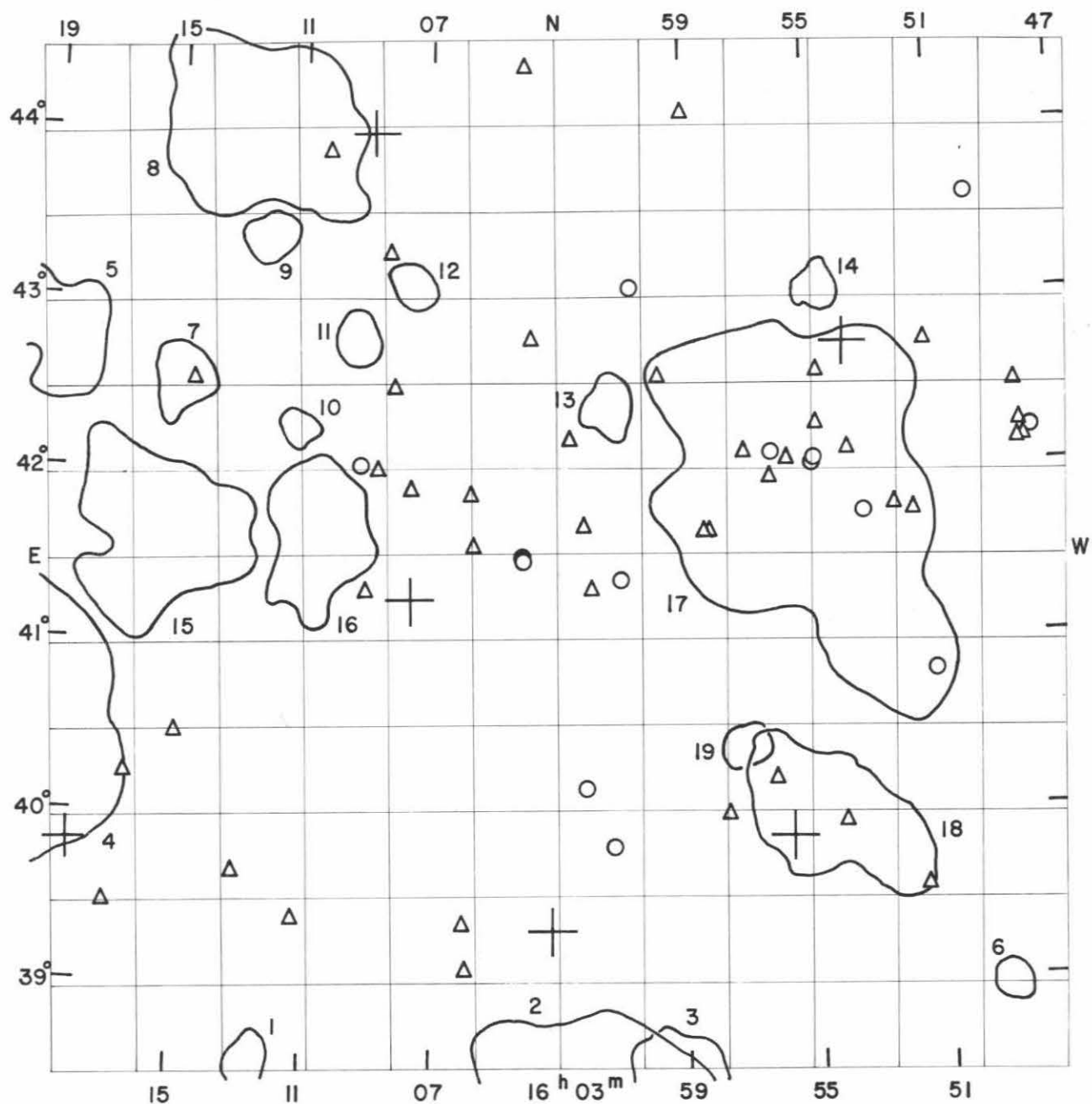
Average number of galaxies per cluster = 123.8

## GALAXIES

Position $\alpha$ 1950 $\delta$ h m o	NGC IC*	$m_p$	$V_s$ km/sec	Remarks
15 16.9 + 42 02	5914	14.9		
15 19.4 + 41 54	5923	14.7		
15 19.7 + 39 22		15.3		
15 20.1 + 41 18		15.2		
15 22.5 + 42 34		15.4		
15 24.0 + 38 56		15.7		
15 24.3 + 41 51	5929+5930	13.0		double system in halo
15 24.6 + 41 28		15.5		
15 24.7 + 42 32		15.0		
15 24.8 + 40 44		14.0		
15 26.4 + 43 05	5934	14.5		
15 26.4 + 43 11		15.7		
15 26.5 + 43 06	5935	15.1		
15 27.4 + 39 48		14.7		
15 27.9 + 42 50		15.2		
15 28.0 + 42 57	5943	14.6		
15 28.0 + 43 05	5945	14.1		
15 28.1 + 42 48		15.6		
15 28.9 + 42 53	5947	14.8		
15 29.7 + 40 36	5950	14.8		
15 30.4 + 42 23		15.7		
15 30.7 + 41 59		15.6		
15 30.9 + 40 24		15.6		
15 31.0 + 41 22		15.3		
15 31.4 + 41 15		14.9		
15 32.8 + 39 54	4557*	15.7		
15 34.0 + 38 50		14.4		double system, connected
15 34.0 + 39 57	5966	13.9		
15 34.2 + 40 00	4563*	15.1		
15 34.3 + 43 39	4562*	13.8		
15 34.4 + 43 40		15.3		very compact

Position a 1950 $\delta$			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
15	34.8	+ 41 58		15.3		
15	34.8	+ 43 41	4564*	14.4		
15	34.9	+ 43 35	4565*	14.8		
15	35.0	+ 43 43	4566*	14.3		
15	35.1	+ 44 24		15.5		diffuse, irregular
15	35.5	+ 43 28	4567*	13.5		
15	36.5	+ 42 38		15.7		
15	37.5	+ 44 02		14.6		
15	39.0	+ 43 55		15.5		
15	40.5	+ 40 09		14.7		
15	41.7	+ 44 16		15.5		
15	41.9	+ 44 04		15.6		
15	42.1	+ 43 56		15.3		
15	42.1	+ 43 57		15.6		
15	42.3	+ 44 28		15.4		
15	42.6	+ 41 15	5992	14.2		
15	42.7	+ 41 17	5993	13.9		
15	42.8	+ 38 35		15.6		
15	43.1	+ 43 40		15.0		
15	44.1	+ 44 24		15.7		
15	47.9	+ 42 11		15.0		
15	48.1	+ 42 08		15.7		
15	48.3	+ 42 07		15.5		
15	48.3	+ 42 14		15.6		
15	48.4	+ 42 27		15.3		





FIELD No. 223

$16^{\text{h}}03^{\text{m}} + 41^{\circ}30'$

Survey Plate No. 1369

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	i	"	
21400	15	53	49.5	+	42	42 38	5.61
21445	15	55	44.1	+	39	50 13	6.44
21623	16	03	13.2	+	39	17 26	6.84
21743	16	07	36.3	+	41	13 29	6.85
21761	16	08	46.9	+	43	57 02	6.54
21984	16	18	12.3	+	39	49 38	5.54

## CLUSTERS OF GALAXIES

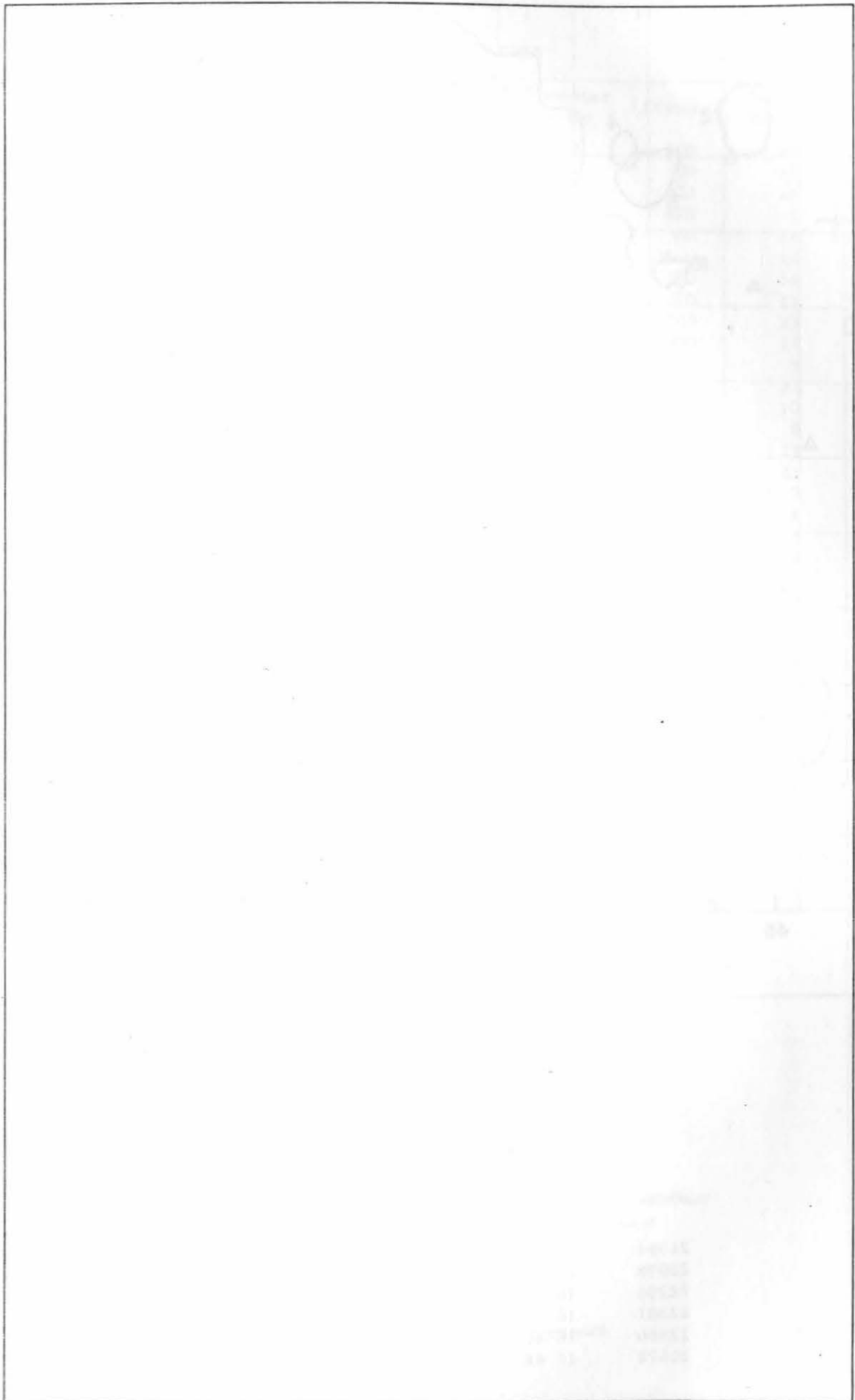
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1549.2 + 3856	compact	64	1.2	ED	6
1554.5 + 3955	medium compact	132	4.8	Near	18
1554.7 + 4301	compact	81	1.4	ED	14
1555.1 + 4146	medium compact	137	10.1	Near	17
1557.1 + 4021	compact	57	1.4	ED	19
1559.0 + 3819	medium compact	99	3.7	D	3
1600.8 + 3804	medium compact	190	7.7	MD	2
1601.3 + 4220	compact	80	1.8	ED	13
1607.6 + 4303	compact	90	1.5	ED	12
1609.3 + 4245	compact	93	1.6	ED	11
1610.5 + 4135	medium compact	91	4.0	VD	16
1611.1 + 4213	compact	66	1.2	ED	10
1612.1 + 4320	compact	102	1.7	ED	9
1612.4 + 4358	medium compact	207	6.3	VD	8
1612.6 + 3832	compact	87	1.3	VD	1
1614.8 + 4230	medium compact	87	1.9	VD	7
1615.4 + 4137	medium compact	133	5.4	MD	15
1619.0 + 4246	medium compact	127	3.7	D	5
1625.5 + 4006	medium compact	686	16.3	Near	4

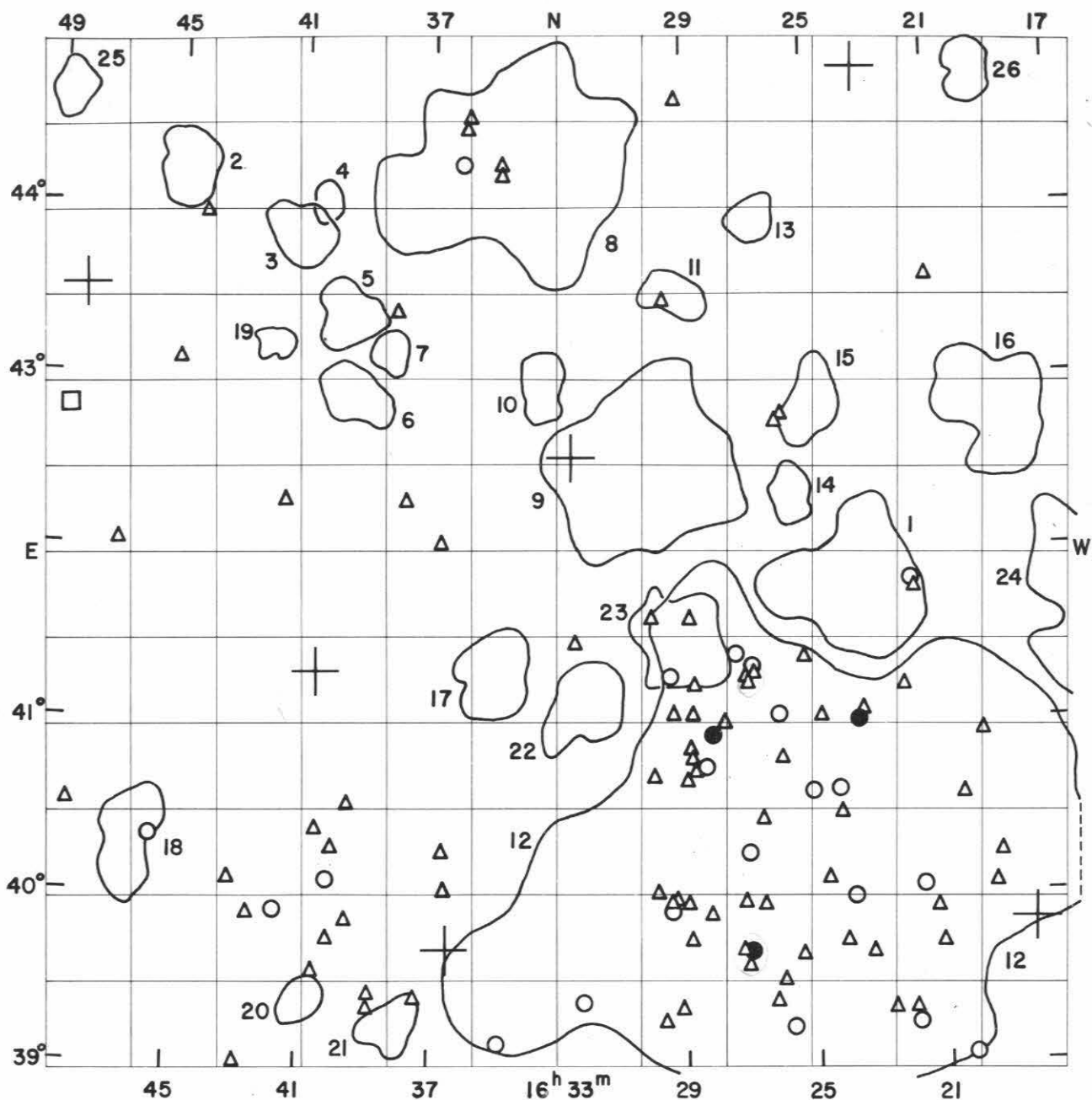
Average number of galaxies per cluster = 137.3

## GALAXIES

Position α 1950 δ	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h m o				
15 47.9 + 42 11		15.0		
15 48.1 + 42 08		15.7		
15 48.3 + 42 07		15.5		
15 48.3 + 42 14		15.6		
15 48.4 + 42 27		15.3		
15 49.7 + 43 33	1144*	14.4		
15 51.1 + 40 47	6013	14.6		
15 51.2 + 42 42		15.6		
15 51.6 + 39 32		15.6		
15 51.8 + 41 43		15.3		
15 52.4 + 41 45		15.1		double system
15 53.3 + 41 43		14.9		
15 53.8 + 42 05		15.4		
15 54.1 + 39 55		15.4		
15 54.7 + 42 14		15.7		
15 54.7 + 42 32		15.5		
15 54.8 + 42 02		15.0		
15 54.9 + 42 01		14.3		extremely compact, halo
15 55.6 + 42 02		15.7		
15 56.2 + 40 10		15.2		
15 56.2 + 41 55		15.1		
15 56.2 + 42 04		15.0		
15 57.0 + 42 04		15.1		
15 57.7 + 39 58		15.5		
15 58.2 + 41 37		15.2		
15 58.3 + 41 37		15.3		compact
15 58.9 + 44 04		15.2		
15 59.8 + 42 31		15.7		
16 00.6 + 43 02		14.7		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
16	00.9	+ 41	20		14.5		double system
16	01.2	+ 39	46		14.5		
16	01.9	+ 41	17		15.6		
16	02.1	+ 40	07		14.8		double system
16	02.1	+ 41	39		15.4		
16	02.6	+ 42	09		15.7		
16	03.8	+ 42	45		15.1		
16	04.0	+ 41	27		15.0		faint plume
16	04.0	+ 41	29		13.6		
16	04.0	+ 44	20		15.6		
16	05.5	+ 41	32		15.5		
16	05.7	+ 41	50		15.6		
16	05.9	+ 39	03	6069	15.5		
16	06.0	+ 39	19		15.1		
16	07.5	+ 41	52		15.5		
16	08.1	+ 42	27		15.3		diffuse spiral
16	08.3	+ 43	15		15.4		
16	08.6	+ 41	59		15.2		compact
16	09.0	+ 41	16		15.3		
16	09.1	+ 42	00		14.9		compact
16	10.2	+ 43	50		15.5		
16	11.3	+ 39	22		15.4		double system
16	13.1	+ 39	38		15.7		
16	14.5	+ 42	31		15.2		double system, contact
16	14.9	+ 40	28		15.7		
16	16.4	+ 40	12		15.4		
16	17.0	+ 39	27		15.6		





FIELD No. 224

$16^{\text{h}}33^{\text{m}} + 42^{\circ}00'$

Survey Plate No. 743

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
21984	16	18	12.3	+	39	49 38	5.54
22098	16	23	14.8	+	44	48 11	7.17
22296	16	32	29.4	+	42	32 21	4.25
22381	16	36	22.1	+	39	40 35	6.95
22486	16	40	31.2	+	41	17 20	7.81
22671	16	48	07.1	+	43	30 56	6.37



## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1615.4 + 4137	medium compact	133	5.4	MD	24
1619.0 + 4246	medium compact	127	3.7	D	16
1619.5 + 4445	medium compact	100	1.5	ED	26
1623.7 + 4145	medium compact	122	4.6	MD	1
1624.9 + 4249	medium compact	172	2.0	VD	15
1625.5 + 4006	medium compact	686	16.3	Near	12
1625.6 + 4217	medium compact	91	1.6	VD	14
1626.7 + 4355	compact	131	1.4	ED	13
1629.0 + 4128	compact	138	3.1	VD	23
1629.2 + 4328	medium compact	107	1.6	ED	11
1630.1 + 4227	medium compact	125	5.7	MD	9
1632.0 + 4105	medium compact	120	2.5	D	22
1633.4 + 4256	compact	106	1.6	ED	10
1634.4 + 4412	medium compact	127	7.0	Near	8
1634.9 + 4115	medium compact	129	2.5	ED	17
1638.1 + 3913	medium compact	99	1.7	ED	21
1638.3 + 4307	medium compact	74	1.2	ED	7
1639.4 + 4253	medium compact	81	2.0	ED	6
1639.6 + 4320	medium compact	84	2.0	VD	5
1640.4 + 4400	compact	89	1.1	ED	4
1640.8 + 3921	compact	103	1.4	VD	20
1641.1 + 4349	medium compact	72	2.0	VD	3
1642.0 + 4310	medium compact	57	1.1	ED	19
1644.9 + 4411	medium compact	111	2.1	VD	2
1646.2 + 4016	medium compact	84	2.5	VD	18
1648.5 + 4440	medium compact	107	1.5	ED	25

Average number of galaxies per cluster = 129.8

## GALAXIES

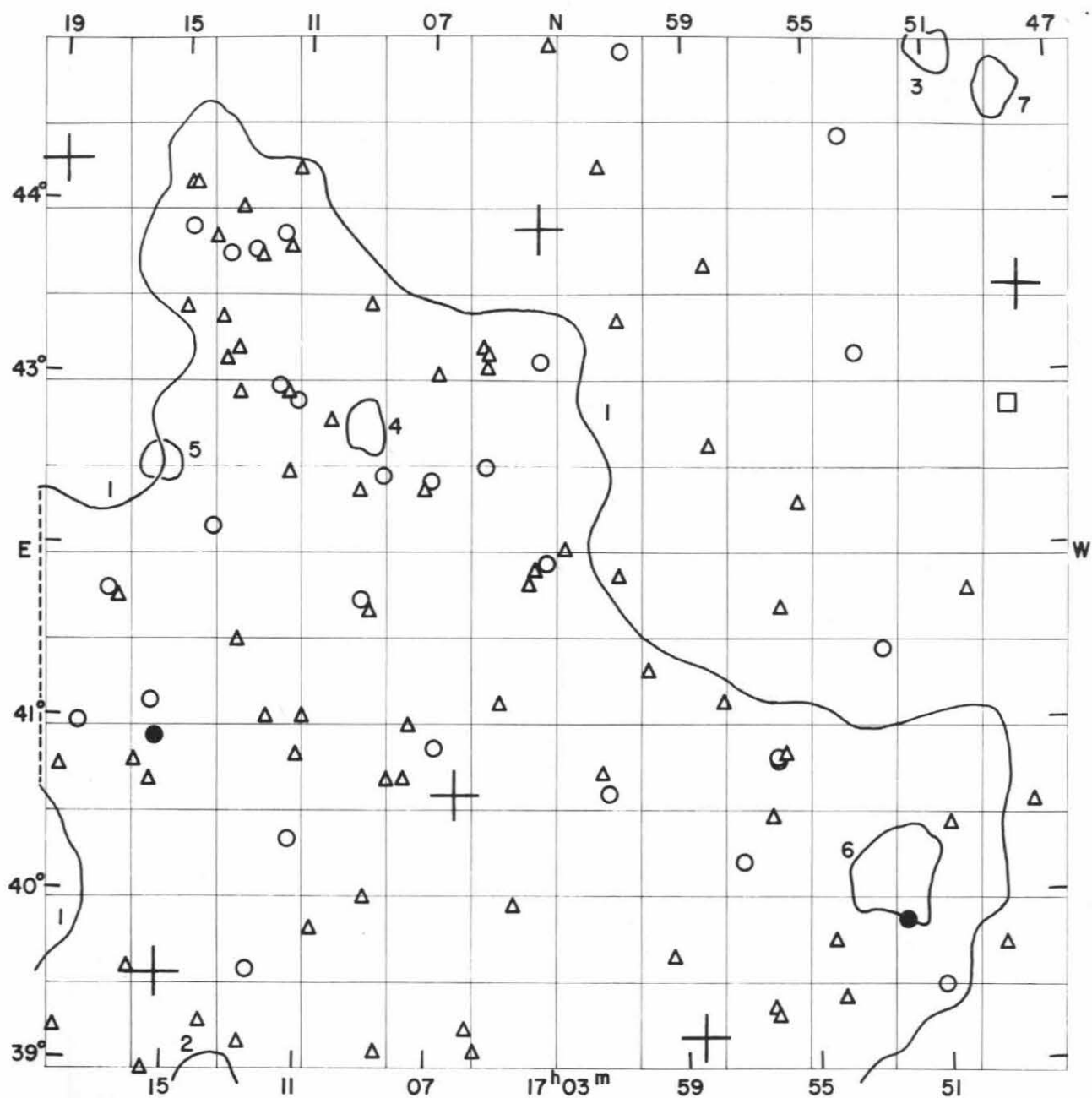
Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
16	19.2	+ 40	14		15.2		
16	19.4	+ 40	03		15.6		
16	19.7	+ 40	56		15.7		diffuse spiral
16	20.2	+ 39	03	6131	14.2		
16	20.3	+ 40	34		15.1		
16	21.0	+ 39	42		15.7		
16	21.0	+ 43	35		15.3		compact
16	21.2	+ 39	55		15.4		
16	21.6	+ 40	02		14.6		
16	21.8	+ 39	15		14.9		
16	21.8	+ 41	46		15.3		
16	21.9	+ 39	20		15.7		
16	21.9	+ 41	50		15.0		
16	22.1	+ 41	12		15.4		extremely compact
16	22.6	+ 39	20		15.6		very compact
16	23.3	+ 39	39		15.6		
16	23.4	+ 41	04	6145	15.1		
16	23.5	+ 41	01	6146	13.8		
16	23.8	+ 39	59		14.9		
16	24.0	+ 39	43		15.4		compact
16	24.2	+ 40	28		15.3		
16	24.2	+ 40	36	6150	14.9		

a	Position		NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
	1950	δ				
h	m	o				
16	24.6	+40 05		15.2		
16	24.7	+41 01		15.7		
16	25.0	+40 35		15.0		
16	25.3	+41 22		15.2		
16	25.4	+39 38		15.3		compact
16	25.6	+39 13		14.8		
16	25.8	+42 47	6159	15.2		
16	25.9	+40 47		15.7		
16	26.0	+39 30	6158	15.5		compact
16	26.0	+41 02	6160	14.8		
16	26.0	+42 45		15.5		
16	26.2	+39 22		15.4		double system
16	26.5	+39 56		15.5		
16	26.5	+40 25		15.5		
16	26.7	+41 17		15.3		double system
16	26.8	+41 20		14.3		
16	26.9	+39 40	6166	13.9		double nucleus
16	27.0	+39 35		15.4		double system
16	27.0	+40 14		14.9		double system
16	27.0	+41 14		15.6		
16	27.0	+41 15		15.5		
16	27.1	+39 57		15.5		
16	27.2	+39 41		15.7		
16	27.4	+41 24		14.8		
16	27.7	+40 59		15.5		very compact
16	28.1	+39 53		15.6		diffuse spiral
16	28.1	+40 55	6173	14.0		
16	28.3	+40 45	6175	15.0		double nebula
16	28.6	+40 43		15.6		
16	28.7	+40 47		15.7		compact
16	28.7	+41 02		15.7		diffuse
16	28.7	+41 13		15.4		diffuse spiral
16	28.8	+39 44		15.6		
16	28.8	+40 50		15.7		
16	28.9	+39 57		15.3		
16	28.9	+40 40	6180	15.2		compact
16	28.9	+41 36		15.4		
16	29.1	+39 20		15.7		
16	29.2	+39 58		15.5		
16	29.2	+44 38		15.6		
16	29.3	+41 02		15.6		very compact
16	29.4	+39 54		14.8		double system
16	29.4	+39 57		15.6		
16	29.4	+41 16		14.8		
16	29.6	+39 16		15.5		very compact
16	29.6	+43 27		15.4		very diffuse, large spiral
16	29.8	+40 00		15.6		compact
16	29.9	+40 41	6184	15.1		
16	30.0	+41 37		15.6		
16	32.1	+39 22	4612*	14.6		
16	32.4	+41 27		15.7		
16	34.7	+44 10		15.4		
16	34.8	+39 08	6195	14.7		
16	34.8	+44 14		15.3		
16	35.8	+44 31		15.4		
16	35.9	+44 27		15.5		
16	36.0	+44 14		14.9		
16	36.5	+40 01		15.4		
16	36.6	+40 15		15.5		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
16	36.7	+42	02		15.5		double system
16	37.3	+39	23		15.5		
16	37.7	+42	17		15.7		
16	38.1	+43	22		15.6		
16	38.8	+39	20		15.6		
16	38.8	+39	25		15.1		compact
16	39.5	+39	52		15.4		
16	39.5	+40	31		15.7		
16	39.9	+40	16		15.1		
16	40.0	+39	45		15.2		
16	40.1	+40	05		14.8		double system very diffuse spiral
16	40.4	+40	22		15.5		
16	40.5	+39	33		15.7		
16	41.6	+42	16		15.3		
16	41.7	+39	54	6212	15.0		compact
16	42.5	+39	53		15.1		
16	42.8	+39	01		15.6		
16	43.1	+40	05		15.6		
16	44.3	+43	57		15.7		
16	45.0	+43	06		15.5		
16	45.6	+40	20		15.0		
16	46.8	+42	02		15.6		compact
16	48.2	+40	31		15.7		
16	48.5	+42	50	6239	12.9	+ 964	$m_H = 13.1$

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6239	-	-	12.70	SBb	12.9	SBb	-	-



FIELD No. 225

$17^{\text{h}}03^{\text{m}} + 42^{\circ}00'$

Survey Plate No. 1135

GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s	° ' "	
22671	16	48	07.1	+ 43 30 56	6.37
22936	16	58	24.4	+ 39 10 18	7.22
23073	17	03	33.4	+ 43 52 45	6.36
23128	17	06	08.7	+ 40 34 49	6.27
23357	17	15	14.4	+ 39 31 10	7.37
23455	17	19	00.4	+ 44 14 24	6.94

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1648.5 + 4440	medium compact	107	1.5	ED	7
1650.7 + 4453	compact	98	1.3	ED	3
1652.6 + 4005	compact	102	2.9	VD	6
1707.6 + 4045	open	1021	29.8	Near	1
1709.0 + 4243	compact	63	1.3	VD	4
1713.6 + 3845	medium compact	103	2.9	MD	2
1715.5 + 4229	compact	63	1.2	VD	5

Average number of galaxies per cluster = 222.4

## GALAXIES

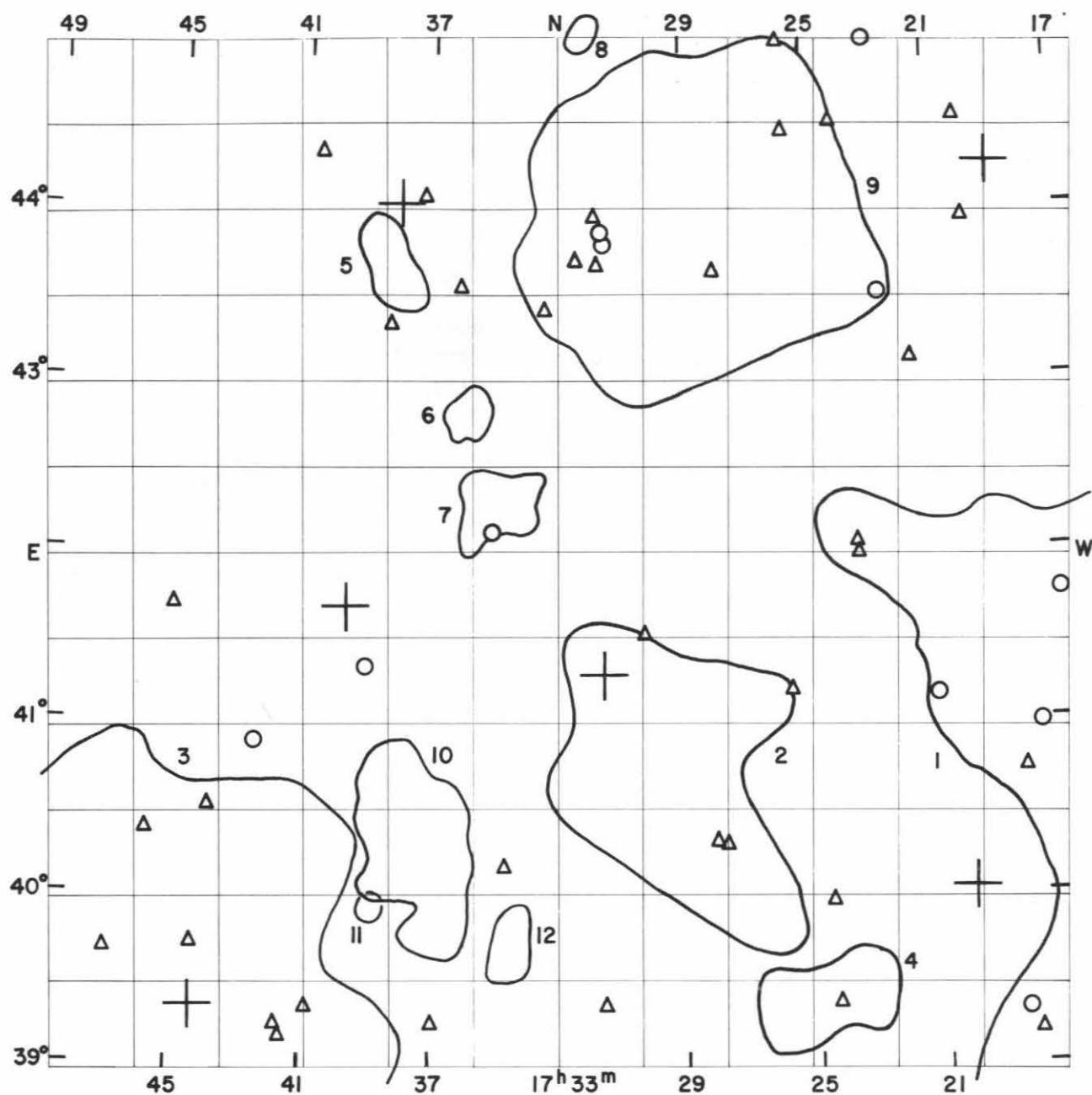
Position α 1950 δ				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	i				
16	48.2	+40	31	6239	15.7	+ 964	m <sub>H</sub> = 31.1 very compact
16	48.5	+42	50		12.9		
16	49.2	+39	41		15.7		
16	50.1	+41	45		15.5		
16	50.8	+40	24		15.6		
16	51.0	+39	27		15.0		
16	52.2	+39	50		13.7		
16	52.7	+41	25		14.9		
16	53.4	+43	08		15.0		
16	53.8	+44	24		14.8		
16	54.1	+39	23	6257	15.7		diffuse spiral
16	54.4	+39	43		15.6		
16	55.3	+42	16		15.7		
16	55.8	+40	49		15.4		
16	55.9	+41	40		15.4		
16	56.0	+40	47		14.8		
16	56.0	+40	48		14.9		
16	56.1	+39	18		15.7		
16	56.2	+39	20		15.6		
16	56.3	+40	27		15.6		
16	57.2	+40	12		14.9		compact
16	57.7	+41	07		15.5		
16	58.2	+42	37		15.6		
16	58.2	+43	40		15.7		
16	59.3	+39	39		15.1		
17	00.1	+41	18		15.4		
17	00.8	+44	55		15.0		
17	00.9	+41	51		15.6		
17	01.0	+43	20		15.5		
17	01.3	+40	36		14.7		
17	01.5	+40	43		15.1		extremely compact
17	01.6	+44	14		15.7		
17	02.7	+42	00		15.5		
17	03.3	+41	56		14.2		
17	03.3	+44	57		15.7		
17	03.5	+43	06		14.9		
17	03.7	+41	54		15.6		
17	03.9	+41	49		15.7		
17	04.3	+39	57		15.5		
17	04.8	+41	07		15.6		
17	05.1	+43	09		15.6		diffuse spiral

Position α 1950 δ				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	'				
17	05.2	+	42 30		14.8		compact
17	05.2	+	43 04		15.3		star superposed
17	05.3	+	43 11		15.2		
17	05.5	+	39 05		15.5		compact
17	05.8	+	39 14		15.5		
17	06.8	+	40 52		14.7		compact
17	06.8	+	43 01		15.4		compact
17	07.0	+	42 24	4643*=6301	14.6		
17	07.2	+	42 21		15.5		
17	07.6	+	41 00		15.2		
17	07.7	+	40 41		15.5		
17	08.2	+	40 40		15.2		
17	08.5	+	39 05		15.5		very compact
17	08.5	+	42 26		15.0		
17	08.8	+	41 40		15.7		very compact
17	08.9	+	40 00		15.1		compact
17	08.9	+	43 26		15.5		
17	09.0	+	41 43	6311	14.9		
17	09.2	+	42 21	6312	15.3		compact
17	10.1	+	42 45		15.1		
17	10.6	+	39 48		15.6		diffuse
17	10.9	+	41 02		15.7		
17	11.1	+	40 49		15.6		
17	11.2	+	42 52		14.5		compact
17	11.2	+	44 13		15.3		
17	11.3	+	40 20	6320	14.9		
17	11.5	+	42 27		15.4		
17	11.5	+	42 55		15.6		very compact
17	11.5	+	43 45		15.4		
17	11.7	+	43 50	6323	14.8		
17	11.8	+	42 57		15.0		
17	12.0	+	41 01		15.4		
17	12.4	+	43 42	6327	15.7		compact
17	12.5	+	39 34		15.0		very compact
17	12.7	+	39 08		15.6		
17	12.7	+	43 45	6329	14.3		
17	13.0	+	41 28		15.5		
17	13.1	+	42 55		15.5		compact
17	13.1	+	43 10	4645*	15.7		
17	13.1	+	43 59		15.5		
17	13.4	+	43 43	6332	14.6		
17	13.5	+	43 06		15.7		
17	13.7	+	43 20		15.1		
17	13.8	+	39 15		15.6		
17	13.8	+	42 08		14.6		compact
17	13.9	+	43 49		15.5		
17	14.6	+	44 07		15.4		
17	14.7	+	43 52	6336	14.5		
17	14.8	+	44 07		15.7		compact
17	14.9	+	43 24		15.3		
17	15.5	+	40 54	6339	13.7		
17	15.6	+	38 57		15.5		
17	15.7	+	40 39		15.4		compact
17	15.7	+	41 07	6343	14.7		compact
17	16.1	+	39 33		15.4		
17	16.1	+	40 45		15.5		
17	16.8	+	41 43	6348	15.6		
17	17.1	+	41 45	6350	14.3		
17	17.9	+	40 59		15.0		

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	i				
17	18.3	+ 39	12		15.6		
17	18.5	+ 40	43		15.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
6239	-	12.70 SBb	12.9 SBb	-



FIELD No. 226  
 $17^{\text{h}}33^{\text{m}} + 42^{\circ}00'$   
 Survey Plate No. 753

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
23455	17	19	00.4	+	44	14 24	6.94
23487	17	20	05.0	+	40	01 21	5.72
23807	17	31	32.0	+	41	16 40	5.82
23964	17	38	01.1	+	44	01 36	7.19
24003	17	39	39.3	+	41	40 43	6.97
24131	17	44	19.3	+	39	20 25	6.56



## CLUSTERS OF GALAXIES

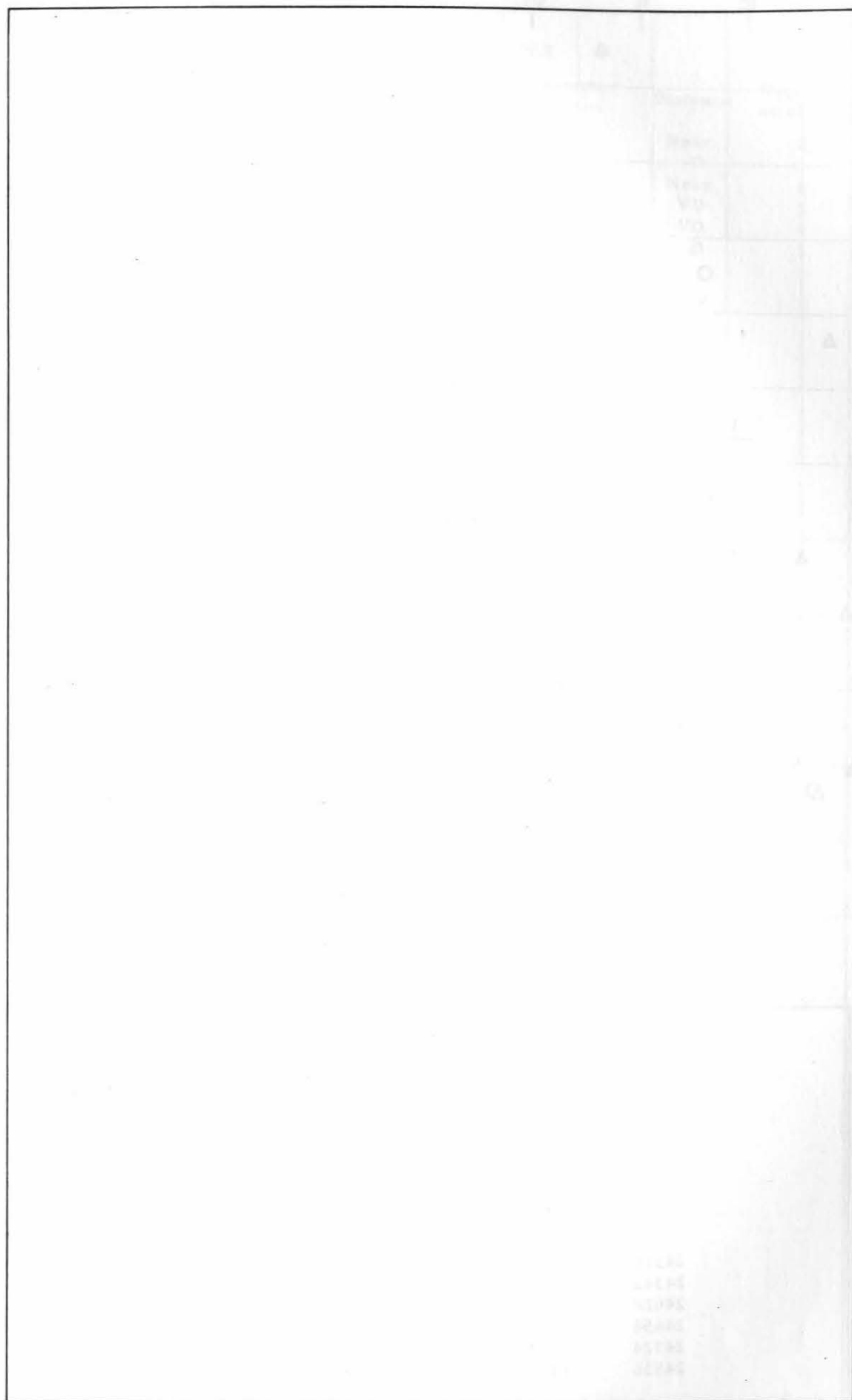
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1707.6 + 4045	open	1021	29.8	Near	1
1724.8 + 3921	medium compact	98	3.6	D	4
1728.5 + 4353	medium compact	157	11.2	Near	9
1729.3 + 4039	medium compact	158	8.1	Near	2
1732.1 + 4500	compact	47	1.0	ED	8
1734.5 + 3942	medium compact	127	1.8	ED	12
1734.9 + 4215	medium compact	69	2.5	VD	7
1735.8 + 4248	compact	104	1.5	ED	6
1737.4 + 4016	medium compact	134	4.9	D	10
1738.2 + 4340	compact	156	2.3	VD	5
1738.8 + 3956	compact	55	0.8	ED	11
1744.5 + 3846	open	205	16.8	Near	3

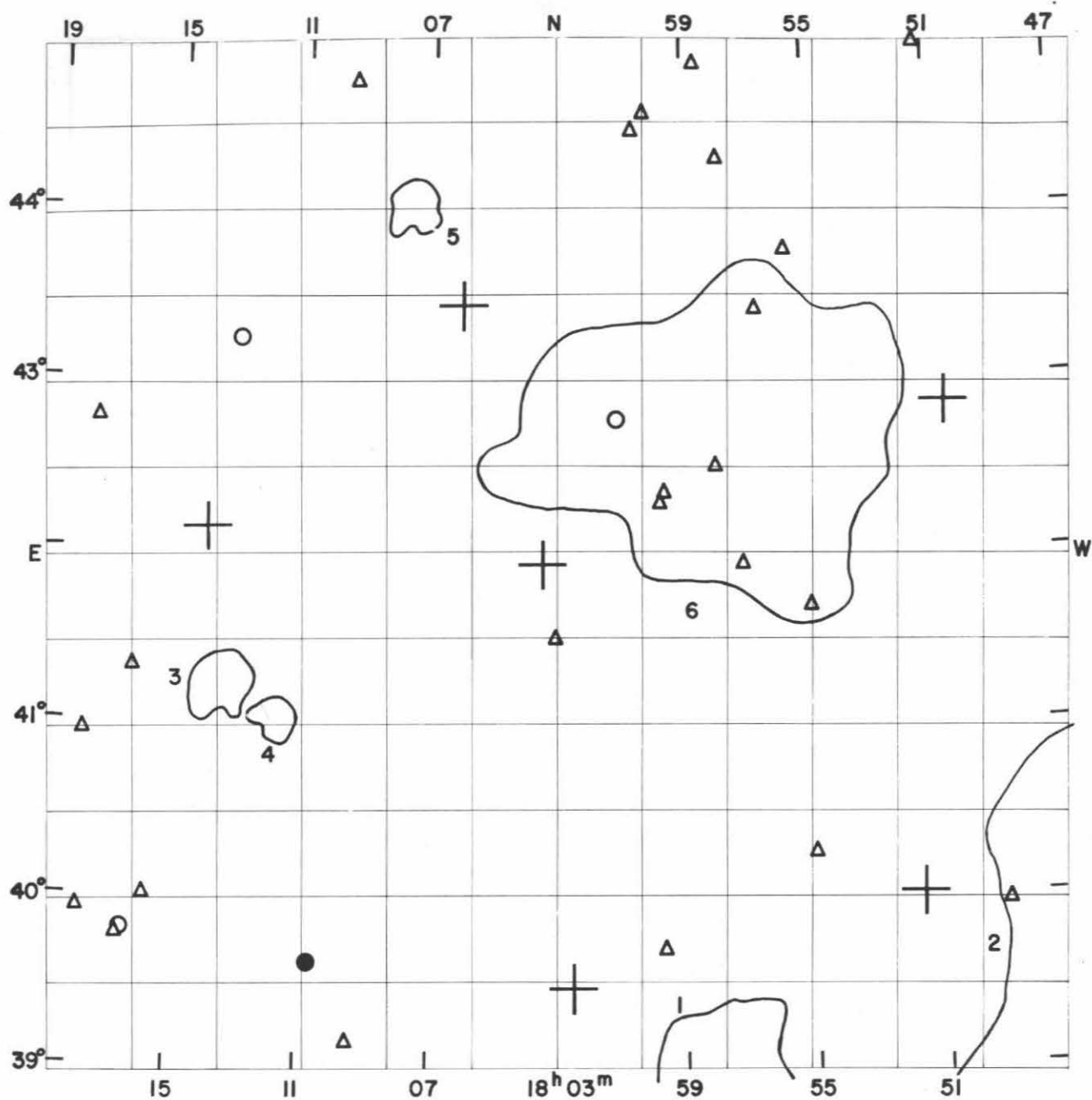
Average number of galaxies per cluster = 194.3

## GALAXIES

Position a 1950 $\delta$ h m o '				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
17 17.1	+ 41	45		6350	14.3		
17 17.9	+ 40	59			15.0		
17 18.3	+ 39	12			15.6		
17 18.5	+ 40	43			15.6		
17 18.7	+ 39	19			14.6		
17 19.9	+ 43	56			15.1		
17 20.1	+ 44	31			15.5		
17 21.1	+ 41	10		6363	14.5		
17 21.7	+ 43	07			15.7		
17 22.7	+ 43	30			15.0		
17 23.0	+ 45	00			14.4		
17 23.5	+ 41	59			15.3		
17 23.5	+ 42	03			15.5		double system
17 24.2	+ 44	30			15.6		
17 24.4	+ 39	22			15.2		
17 24.5	+ 39	58			15.5		
17 25.7	+ 41	12			15.6		
17 25.8	+ 44	27			15.3		double system
17 25.9	+ 44	58			15.5		very compact
17 27.7	+ 40	18			15.7		compact
17 28.0	+ 40	19			15.6		compact
17 28.1	+ 43	38			15.4		
17 30.3	+ 41	31			15.7		compact
17 31.5	+ 39	21			15.7		
17 31.5	+ 43	47		1262*	14.9		
17 31.6	+ 43	51		1263*	14.8		
17 31.8	+ 43	40		1264*	15.6		
17 31.9	+ 43	57			15.5		
17 32.5	+ 43	42			15.7		compact
17 33.4	+ 43	25			15.7		
17 34.7	+ 40	10			15.4		
17 35.1	+ 42	07		1265*	14.3		
17 36.1	+ 43	33			15.7		
17 36.9	+ 39	15			15.4		long jet
17 37.3	+ 44	05			15.7		
17 38.3	+ 43	20			15.2		

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	r				
17	39.0	+ 41	20		14.8		
17	40.6	+ 44	20		15.6		
17	40.8	+ 39	21		15.3		
17	41.6	+ 39	11		15.5		
17	41.7	+ 39	15		15.5		
17	42.5	+ 40	53		15.0		
17	43.9	+ 40	31		15.6		compact
17	44.3	+ 39	43		15.2		compact
17	45.0	+ 41	42		15.7		
17	45.8	+ 40	22		15.5		compact
17	47.0	+ 39	40		15.4		





FIELD No. 227  
 $18^h 03^m + 42^{\circ} 00'$   
 Survey Plate No. 324

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
24316	17	50	37.3	+	42	52 04	7.66
24342	17	51	40.3	+	40	00 59	5.12
24628	18	02	28.1	+	39	28 36	7.46
24658	18	03	27.1	+	41	56 24	6.42
24724	18	05	58.3	+	43	27 16	5.11
24936	18	14	05.3	+	42	08 28	5.42

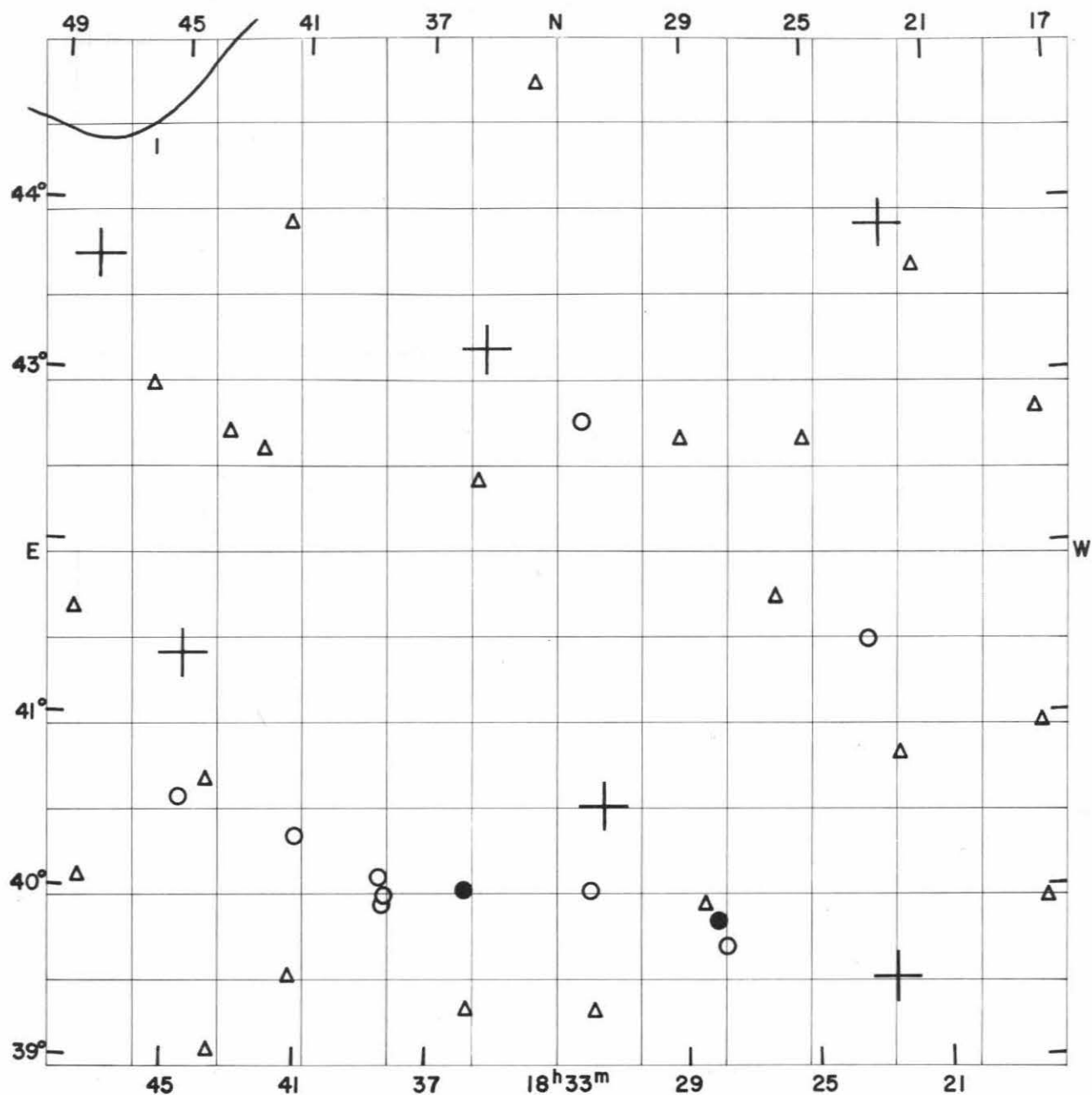
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1744.5 + 3846	open	205	16.8	Near	2
1757.8 + 3842	open	97	6.1	D	1
1757.9 + 4238	open	155	11.1	Near	6
1807.6 + 4400	medium compact	73	1.6	VD	5
1811.7 + 4100	compact	74	1.4	VD	4
1813.5 + 4113	medium compact	77	2.0	D	3

Average number of galaxies per cluster = 113.5

## GALAXIES

Position a 1950 $\delta$ h m o			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
17 49.0 + 39 58				15.6		very compact
17 51.2 + 44 59				15.5		
17 55.0 + 40 15				15.5		very compact
17 55.0 + 41 42				15.7		
17 55.7 + 43 45				15.7		compact
17 56.6 + 43 25				15.6		compact
17 57.1 + 41 56				15.6		
17 57.9 + 44 17				15.4		compact
17 58.0 + 42 31				15.7		double system, jet
17 58.5 + 44 51				15.3		
17 59.6 + 39 42				15.4		
17 59.6 + 42 21				15.6		extremely compact
17 59.8 + 42 17				15.7		
18 00.2 + 44 34				15.7		system with jet
18 00.5 + 44 28				15.6		compact
18 01.1 + 42 47				15.0		double system
18 03.0 + 41 30				15.6		
18 09.4 + 39 10				15.4		
18 09.5 + 44 45				15.3		compact
18 10.7 + 39 37	6585			13.6		
18 13.1 + 43 15	6606			14.4		
18 15.7 + 40 01				15.2		
18 16.3 + 41 20				15.6		
18 16.4 + 39 48				15.0		
18 16.5 + 39 46				15.5		
18 17.7 + 42 46				15.5		diffuse spiral
18 17.8 + 39 56				15.7		
18 17.8 + 40 57				15.4		double system



FIELD No. 228  
 18<sup>h</sup>33<sup>m</sup> + 42°00'  
 Survey Plate No. 1445

GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	°	'	"	
25134	18	22	30.1	+	43	52 46	7.05
25137	18	22	34.9	+	39	28 44	5.04
25359	18	31	31.1	+	40	29 35	7.00
25464	18	35	13.7	+	43	10 42	6.26
25732	18	44	37.0	+	41	23 12	5.88
25834	18	47	49.3	+	43	40 31	6.79

## CLUSTERS OF GALAXIES

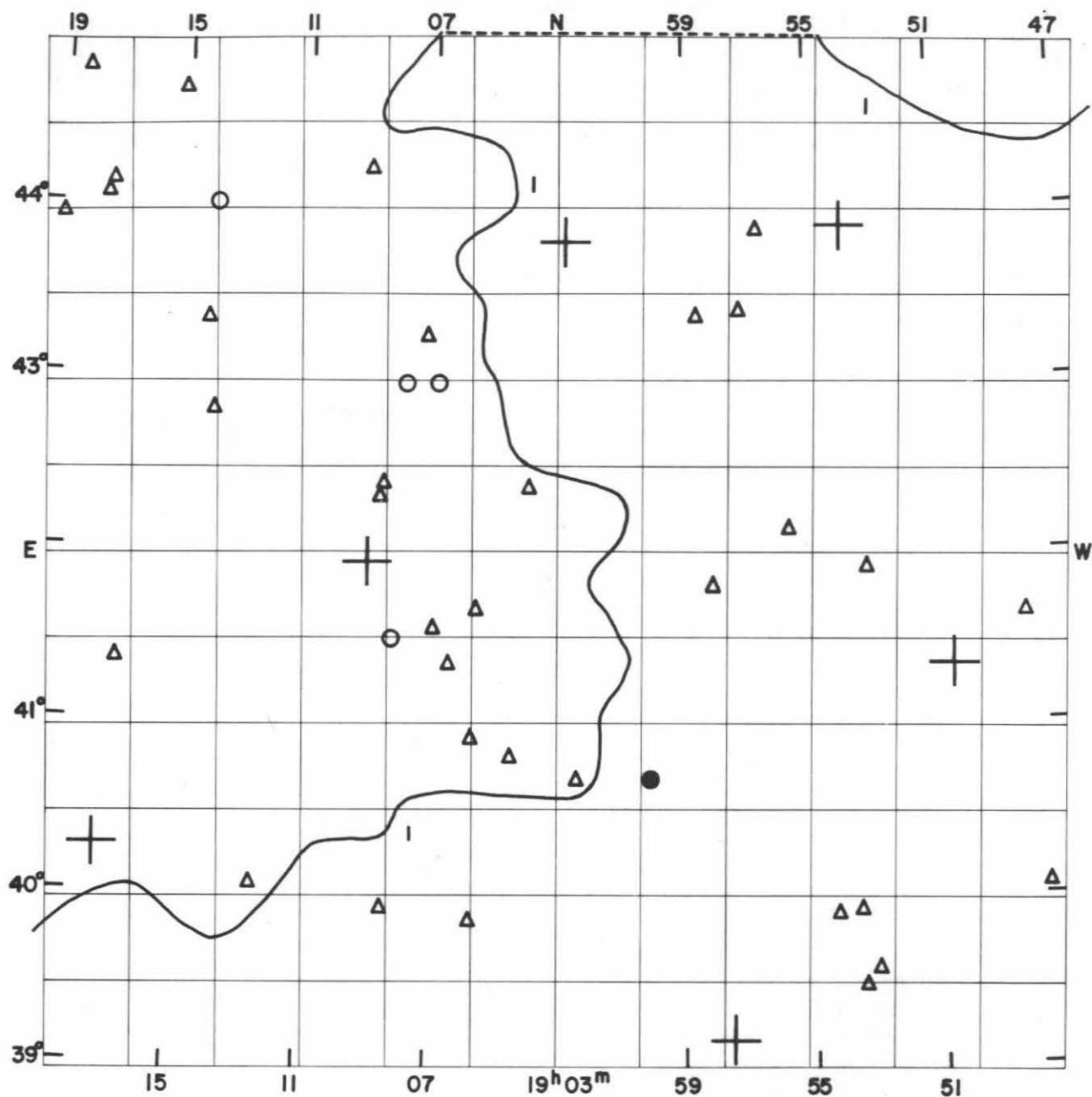
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1*

Average number of galaxies per cluster = 3755.0

\*) see special map on page 386

## GALAXIES

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
18	17.7	+42 46		15.5		diffuse spiral
18	17.8	+39 56		15.7		
18	17.8	+40 57		15.4		double system
18	21.5	+43 38		15.7		
18	22.3	+40 47		15.6		
18	23.2	+41 28		14.5		
18	25.1	+42 39		15.1		
18	26.0	+41 44		15.4		diffuse spiral
18	27.8	+39 41	1288*	14.3		
18	28.0	+39 50	6646	13.7		
18	28.4	+39 56	1289*	15.3		
18	29.0	+42 40		15.5		very diffuse
18	31.8	+39 19		15.7		very compact
18	31.9	+40 01	6663	14.8		
18	32.2	+42 46	6672	14.9		compact, faint plume
18	33.8	+44 44		15.5		extremely compact
18	35.5	+42 25		15.2		
18	35.8	+39 20		15.5		compact, jets
18	35.8	+40 02	6675	13.3		
18	38.2	+40 00	6685	15.0		compact
18	38.3	+39 57	4772*	14.7		
18	38.5	+40 06	6686	14.9		compact
18	41.1	+40 20	6695	14.3		
18	41.2	+39 30		15.5		
18	41.6	+43 54		15.3		compact
18	42.3	+42 35		15.5		
18	43.4	+42 40		15.3		compact
18	43.6	+39 03		15.6		
18	43.9	+40 39		15.4		
18	44.7	+40 32		15.0		
18	45.9	+42 56		15.6		
18	47.8	+40 04		15.7		compact
18	48.2	+41 37		15.3		



FIELD No. 229  
 19<sup>h</sup>03<sup>m</sup> + 42°00'  
 Survey Plate No. 340

GC STARS

Nos.	R.A.			Decl.	m <sub>p</sub>
	h	m	s		
25906	18	50	30.8	+ 41 19 17	6.20
25996	18	53	48.7	+ 43 52 45	Var.
26095	18	57	31.2	+ 39 08 50	6.25
26252	19	02	43.9	+ 43 48 13	6.78
26433	19	08	57.5	+ 41 56 19	7.13
26653	19	17	17.7	+ 40 16 02	6.70



## CLUSTERS OF GALAXIES

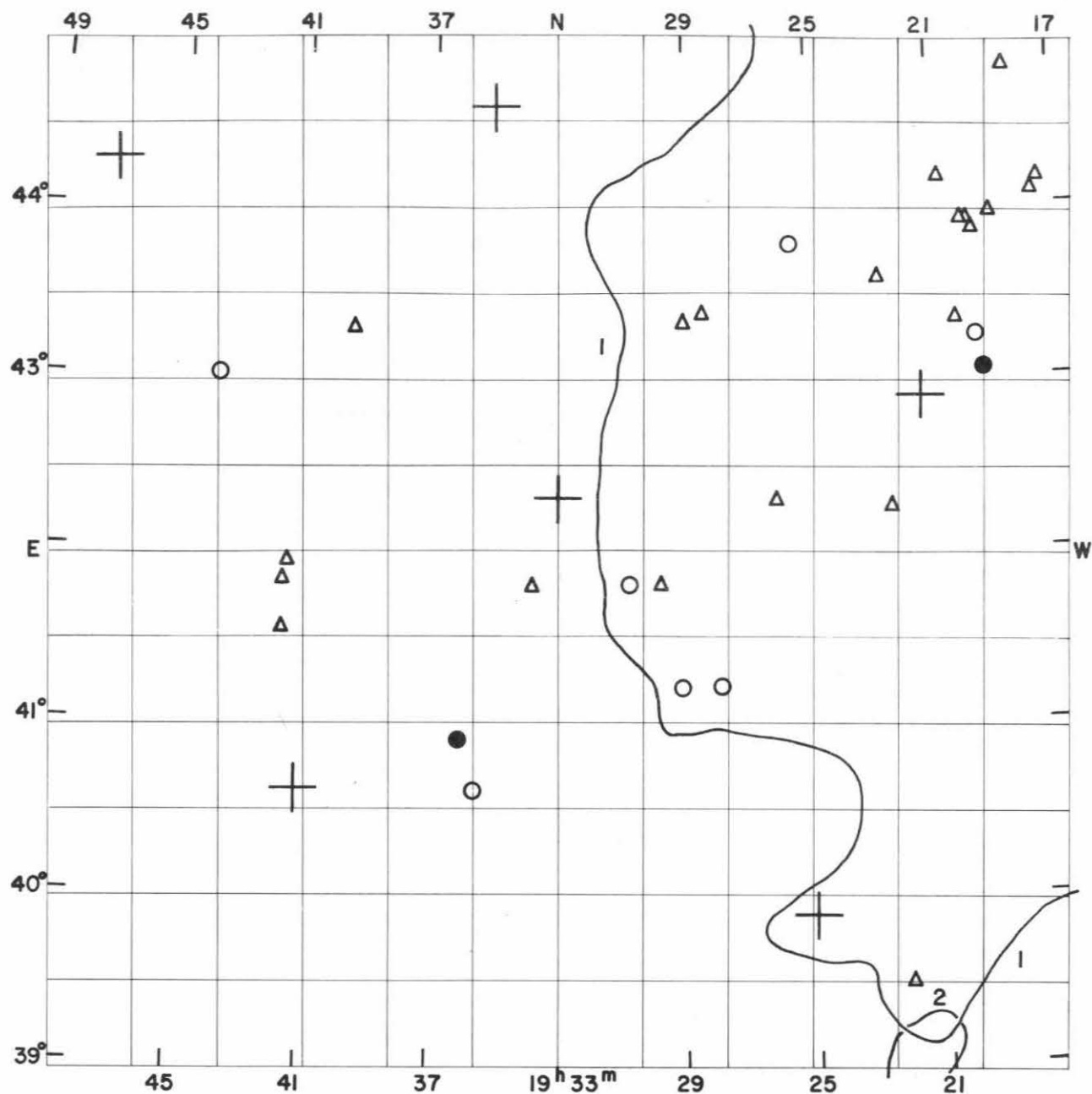
Cluster	Character	Popu- lation	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1*

Average number of galaxies per cluster = 3755.0

\*) see special map on page 386

## GALAXIES

Position a 1950 δ				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	i				
18	47.8	+40	04		15.7		compact
18	48.2	+41	37		15.3		
18	53.0	+39	33		15.5		
18	53.2	+41	54		15.3		
18	53.4	+39	28		15.3		
18	53.6	+39	54		15.7		
18	54.3	+39	53		15.5		diffuse
18	55.6	+42	08		15.6		
18	56.6	+43	52		15.1		
18	57.1	+43	24		15.4		
18	58.0	+41	48		15.7		
18	58.6	+43	22		15.3		diffuse
19	00.0	+40	41	6745	13.3		triple system, bridges + plumes
19	02.4	+40	41		15.6		compact
19	03.9	+42	23		15.4		
19	04.5	+40	49		15.7		diffuse spiral
19	05.5	+41	41		15.6		diffuse spiral
19	05.7	+39	51		15.5		compact
19	05.7	+40	55		15.5		
19	06.4	+41	21		15.4		
19	06.8	+43	00		14.7		
19	06.9	+41	34		15.2		
19	07.2	+43	16		15.2		
19	07.8	+42	59		14.8		
19	08.2	+41	30		14.9		
19	08.4	+39	56		15.4		
19	08.5	+42	24		15.7		compact
19	08.6	+42	19		15.7		
19	09.0	+44	13		15.6		
19	12.5	+40	05		15.7		very diffuse spiral
19	13.9	+42	49		15.1		
19	14.0	+44	01		14.6		
19	14.2	+43	21		15.7		
19	15.2	+44	42		15.5		
19	16.8	+41	21		15.7		
19	17.4	+44	08		15.7		double system, bridge
19	17.6	+44	04		15.4		
19	18.4	+44	48		15.1		
19	19.0	+43	57		15.6		very compact



FIELD No. 230  
 $19^{\text{h}}33^{\text{m}} + 42^{\circ}00'$   
 Survey Plate No. 281

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
26767	19	21	24.8	+	42	52 35	6.92
26866	19	25	02.5	+	39	51 35	7.22
27070	19	33	03.3	+	42	18 08	5.29
27140	19	35	04.9	+	44	35 00	5.16
27298	19	41	14.3	+	40	36 06	6.72
27447	19	47	25.2	+	44	15 09	7.5

## CLUSTERS OF GALAXIES

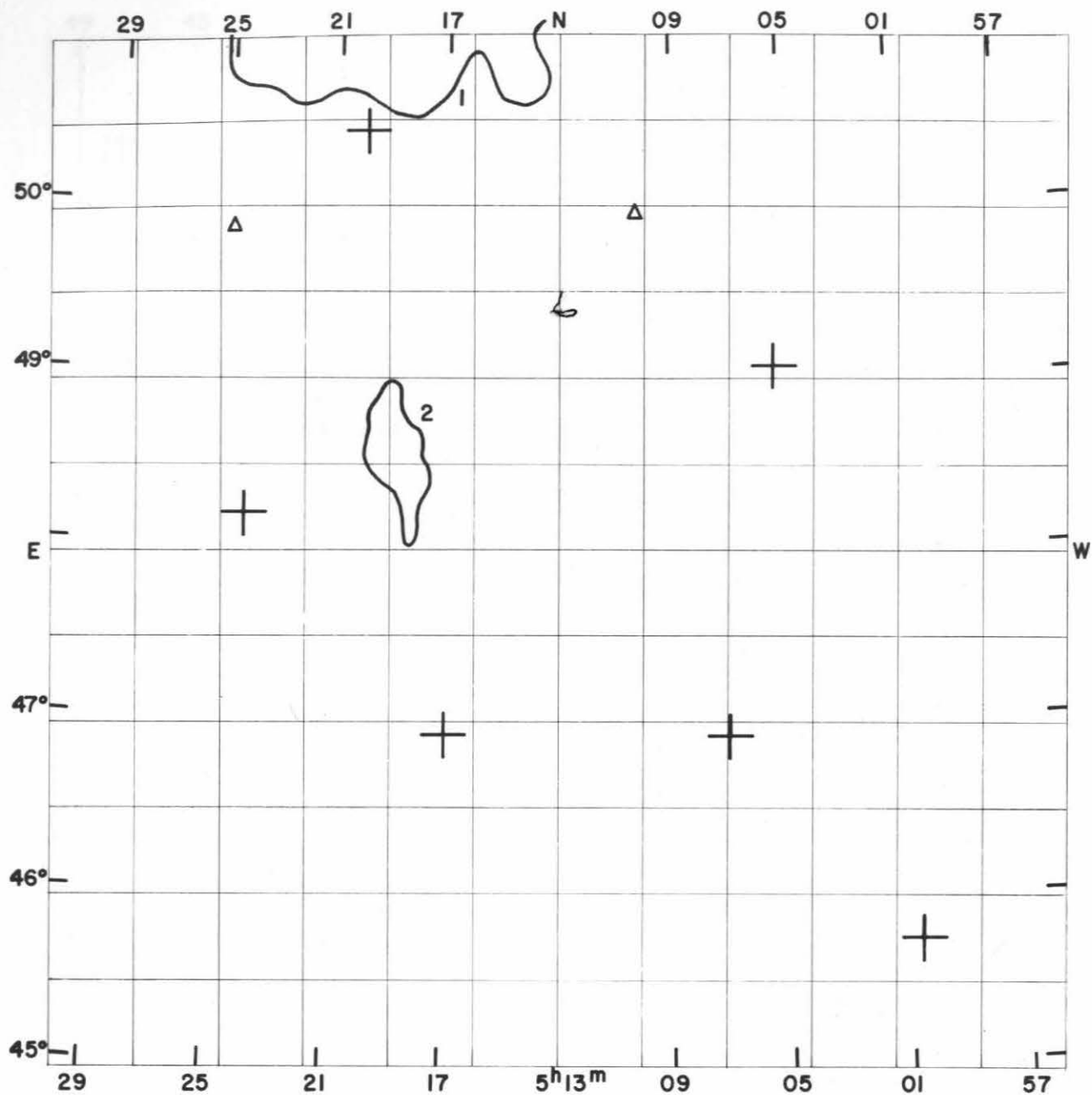
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1*
1921.9 + 3901	medium compact	67	2.6	MD	2

Average number of galaxies per cluster = 1911.0

\*) see special map on page 386

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
19	17.4	+44 08		15.7		double system, bridge
19	17.6	+44 04		15.4		
19	18.4	+44 48		15.1		
19	19.0	+43 57		15.6		very compact
19	19.4	+43 02	6792	13.4		
19	19.6	+43 14		14.5		
19	19.6	+43 52		15.3		triple system, halo
19	19.8	+43 55		15.7		
19	20.0	+43 55		15.4		
19	20.2	+43 20		15.7		compact
19	20.7	+44 10		15.4		very compact
19	22.1	+39 28		15.1		
19	22.4	+42 14		15.2		
19	22.7	+43 35		15.5		
19	25.6	+43 46		14.9		
19	26.0	+42 17		15.7		
19	27.9	+41 13		14.2		
19	28.4	+43 22		15.6		
19	29.0	+43 19		15.4		
19	29.1	+41 13		14.6		
19	29.8	+41 48		15.6		compact
19	30.8	+41 48		14.8		
19	33.9	+41 47		15.6		
19	35.7	+40 36		14.4		
19	36.2	+40 53		14.0		
19	39.5	+43 18		15.2		
19	41.6	+41 55		15.5		
19	41.7	+41 32		15.3		
19	41.7	+41 49		15.3		
19	43.9	+43 01		14.6		



FIELD No. 231  
 $5^{\text{h}}13^{\text{m}} + 48^{\circ}00'$   
 Survey Plate No. 224

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
6170	5	00	36.1	+	45	42 40	6.53
6272	5	05	15.6	+	49	03 29	6.63
6311	5	06	59.2	+	46	54 09	5.59
6520	5	16	55.2	+	46	54 51	6.48
6604	5	20	00.1	+	50	25 24	8.9
6709	5	24	07.0	+	48	11 09	6.71

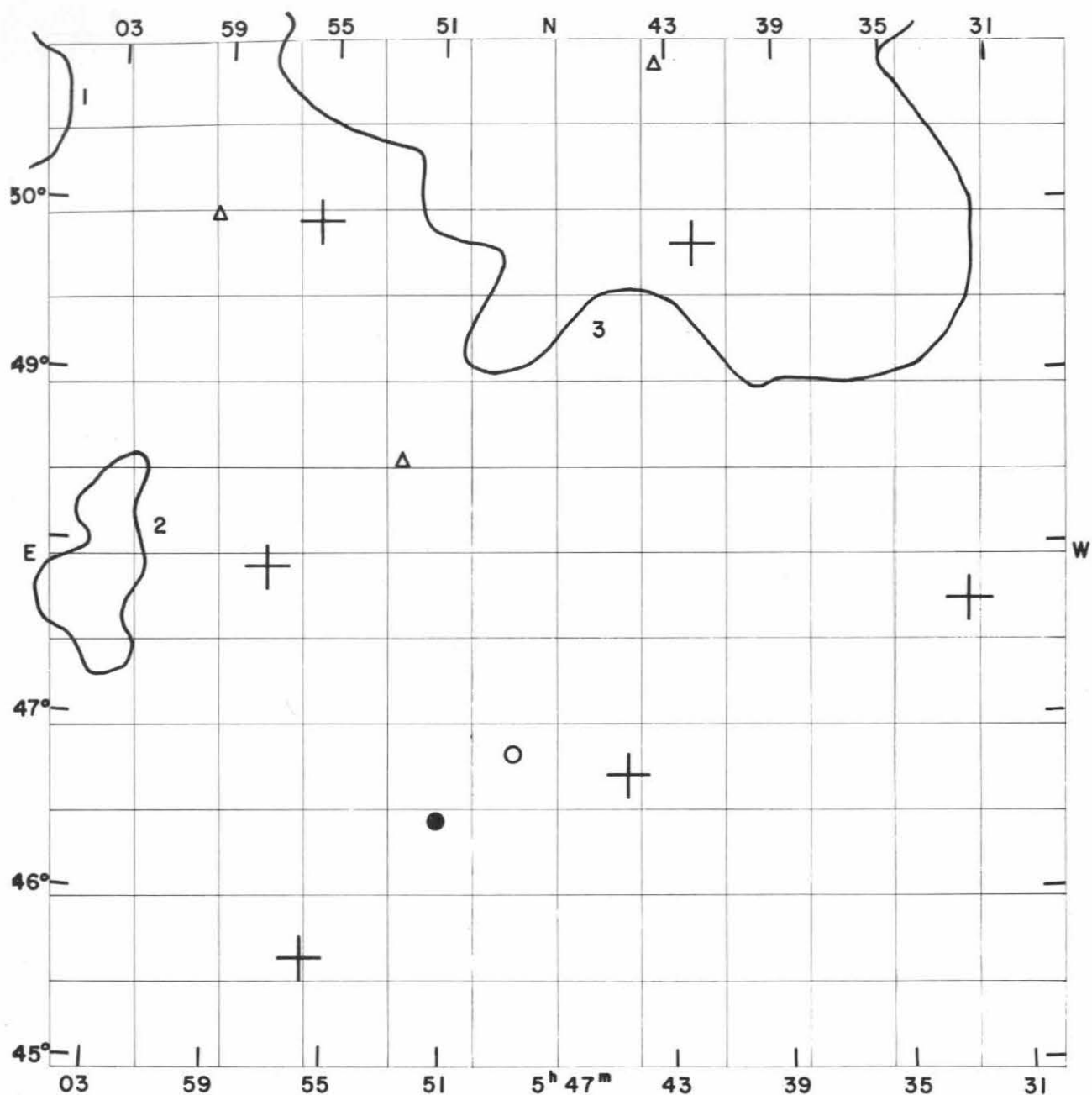
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0517.8 + 5108	medium compact	108	8.4	Near	1
0518.7 + 4832	compact	71	2.6	MD	2

Average number of galaxies per cluster = 89.5

## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
5	10.2	+49	57		15.4		compact
5	24.8	+49	50		15.5		



FIELD No. 232

$5^h 47^m + 48^{\circ} 00'$

Survey Plate No. 637

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
6922	5	32	29.2	+	47	41 05	6.05
7182	5	42	01.5	+	49	48 24	5.52
7240	5	44	30.1	+	46	42 20	7.10
7523	5	55	28.7	+	49	55 17	6.07
7534	5	55	43.1	+	45	37 00	6.60
7580	5	57	10.9	+	47	54 04	5.68

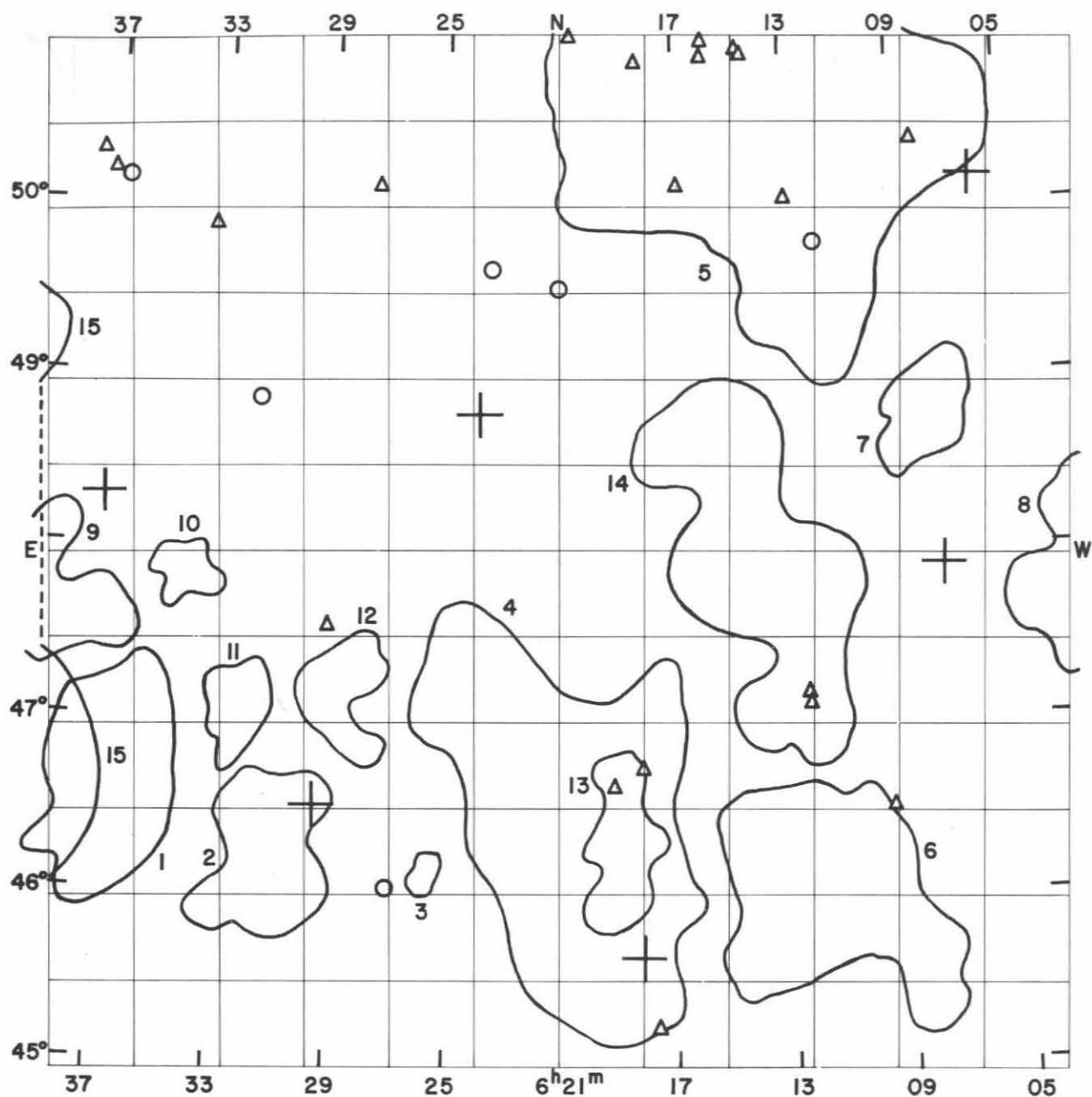
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0544.4 + 5036	open	230	17.7	Near	3
0603.0 + 4746	medium compact	110	4.3	D	2
0628.9 + 5232	open	785	28.6	Near	1

Average number of galaxies per cluster = 375.0

## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	'				
5	43.3	+ 50	50		15.6		compact
5	48.5	+ 46	49		14.8		triple system, bridges
5	51.1	+ 46	26		13.9		double system, connected
5	52.4	+ 48	31		15.7		diffuse spiral
5	59.2	+ 49	55		15.5		compact



FIELD No. 233

$6^{\text{h}}21^{\text{m}} + 48^{\circ}00'$

Survey Plate No. 225

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
7811	6	06	05.7	+	50	09 53	8.6
7846	6	07	28.2	+	47	55 06	6.84
8157	6	18	03.7	+	45	38 09	7.37
8326	6	23	48.7	+	48	48 27	7.29
8487	6	29	26.2	+	46	30 51	6.78
8695	6	37	03.1	+	48	18 09	8.2



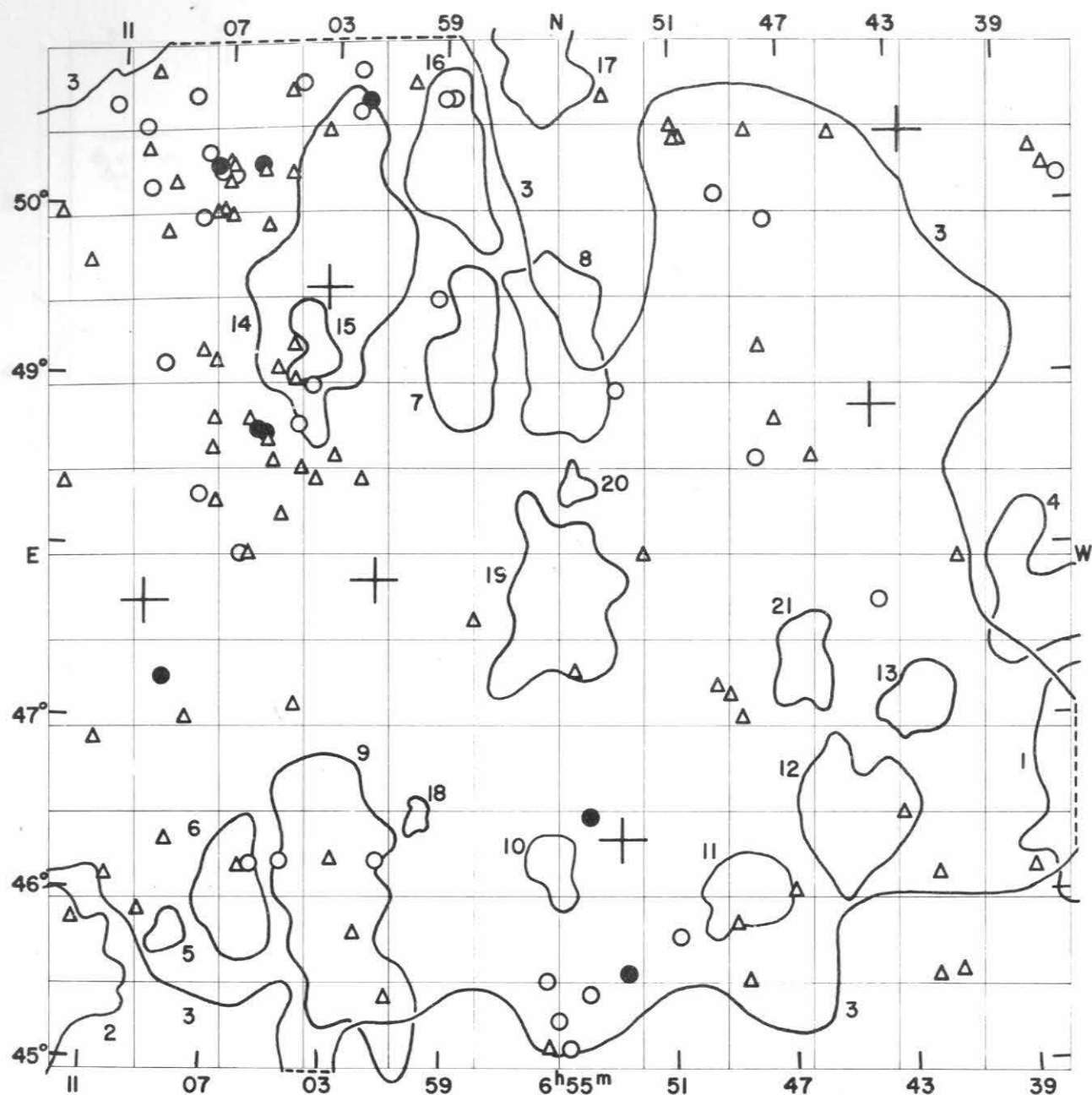
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0603.0 + 4746	medium compact	110	4.3	D	8
0607.9 + 4848	medium compact	69	3.2	MD	7
0611.6 + 4601	medium compact	105	7.2	Near	6
0613.9 + 4753	medium compact	114	8.0	Near	14
0618.7 + 4618	medium compact	58	3.4	D	13
0620.4 + 4620	open	143	10.0	Near	4
0625.6 + 4608	compact	65	1.1	VD	3
0628.5 + 4709	medium compact	55	3.0	ED	12
0628.9 + 5232	open	785	28.6	Near	5
0631.0 + 4613	compact	97	4.6	MD	2
0632.0 + 4704	medium compact	84	2.5	VD	11
0634.1 + 4750	medium compact	60	1.9	VD	10
0636.5 + 4637	medium compact	103	5.8	MD	1
0638.0 + 4740	medium compact	76	3.7	D	9
0700.4 + 4801	medium compact	1273	36.4	Near	15

Average number of galaxies per cluster = 213.1

## GALAXIES

Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
6	08.2	+ 50 23		15.6		
6	09.5	+ 46 31		15.1		compact
6	11.9	+ 49 47		15.0		
6	12.3	+ 47 07		15.1		very compact
6	12.4	+ 47 11		15.2		compact
6	12.9	+ 50 03		15.6		
6	14.4	+ 50 54		15.5		
6	14.6	+ 50 55		15.3		compact
6	15.9	+ 50 58		15.6		
6	16.0	+ 50 52		15.7		triple system
6	16.8	+ 50 07		15.4		diffuse
6	17.6	+ 45 15		15.7		
6	18.1	+ 46 45		15.5		
6	18.3	+ 50 51		15.7		double nebula
6	19.1	+ 46 38		15.6		
6	20.6	+ 51 00		15.5		
6	21.1	+ 49 32		14.9		
6	23.5	+ 49 38		14.7		
6	26.9	+ 46 02		15.0		
6	27.5	+ 50 07		15.7		
6	29.1	+ 47 33		15.3		double system
6	31.6	+ 48 53		14.8		
6	33.4	+ 49 53		15.6		
6	36.7	+ 50 09		14.4		
6	37.2	+ 50 12		15.4		
6	37.7	+ 50 18		15.2		double system



FIELD No. 234

$6^{\text{h}}55^{\text{m}} + 48^{\circ}00'$

Survey Plate No. 691

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	t	n	
8821	6	42	27.7	+	50	26 03	7.12
8858	6	43	51.0	+	48	50 41	5.28
9075	6	52	50.5	+	46	20 23	5.80
9317	7	01	24.3	+	47	51 03	6.36
9363	7	03	12.2	+	49	32 58	7.72
9525	7	09	29.4	+	47	41 36	6.62

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0636.5 + 4637	medium compact	103	5.8	MD	1
0638.0 + 4740	medium compact	76	3.7	D	4
0642.6 + 4706	compact	94	2.1	D	13
0644.8 + 4626	medium compact	108	4.0	MD	12
0646.4 + 4720	medium compact	65	2.5	VD	21
0648.7 + 4601	compact	128	2.5	D	11
0654.4 + 4823	medium compact	54	0.9	ED	20
0654.8 + 4911	medium compact	91	4.2	MD	8
0654.9 + 4742	medium compact	86	4.5	D	19
0655.1 + 4609	medium compact	83	1.7	D	10
0655.5 + 5054	medium compact	102	3.6	VD	17
0658.3 + 4908	medium compact	131	3.2	MD	7
0658.9 + 5014	medium compact	83	3.5	D	16
0659.8 + 4627	compact	45	0.8	ED	18
0700.4 + 4801	medium compact	1273	36.4	Near	3
0702.5 + 4554	medium compact	185	6.3	D	9
0703.0 + 4935	medium compact	160	6.5	D	14
0703.7 + 4913	compact	88	1.8	VD	15
0706.0 + 4600	medium compact	141	3.1	MD	6
0708.3 + 4544	medium compact	71	1.2	VD	5
0712.4 + 4523	medium compact	111	5.1	MD	2

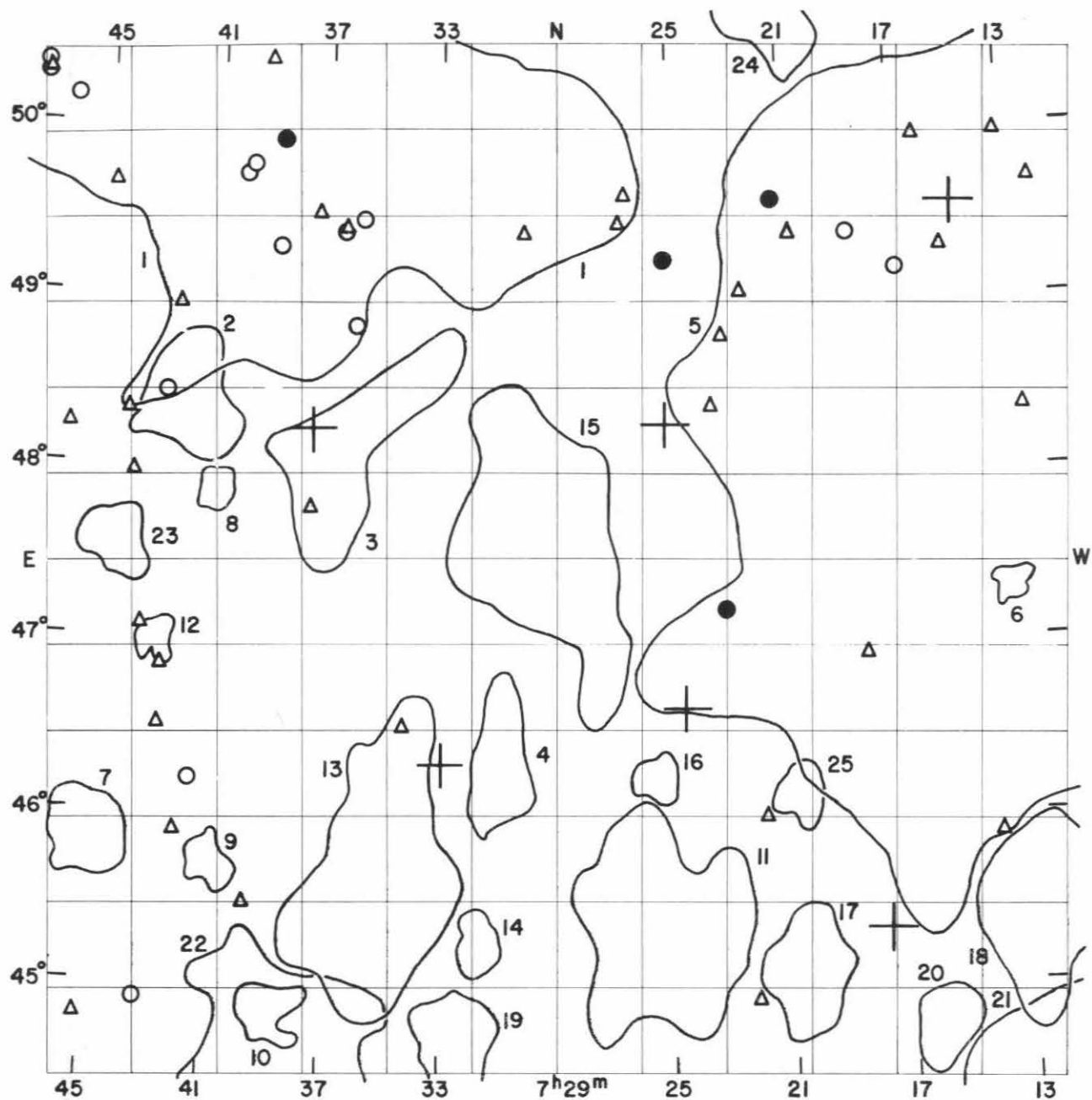
Average number of galaxies per cluster = 156.1

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
6	36.7	+ 50 09		14.4		
6	37.2	+ 50 12		15.4		
6	37.7	+ 50 18		15.2		double system
6	38.8	+ 46 08		15.6		
6	41.0	+ 47 56		15.7		
6	41.3	+ 45 33		15.6		compact
6	42.1	+ 46 07		15.5		
6	42.2	+ 45 31		15.2		diffuse
6	43.2	+ 46 29		15.4		
6	43.8	+ 47 43		14.9		
6	45.1	+ 50 26		15.7		
6	46.0	+ 48 34		15.4		diffuse
6	47.0	+ 46 02		15.3		
6	47.2	+ 48 47		15.1		
6	47.5	+ 49 56		14.5		
6	47.8	+ 49 12		15.7		
6	48.0	+ 48 34		14.2		
6	48.1	+ 50 28		15.7		
6	48.6	+ 45 31		15.7		
6	48.6	+ 47 03		15.7		
6	49.0	+ 45 51		15.3		
6	49.0	+ 47 11		15.7		double system, connected
6	49.3	+ 50 05		14.6		
6	49.5	+ 47 15		15.7		
6	50.5	+ 50 26		15.6		
6	50.7	+ 50 25		15.1		
6	50.9	+ 45 47		14.9		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
6	50.9	+	50 30		15.7		
6	52.0	+	48 00		15.2		
6	52.6	+	45 34	2303	13.9		
6	53.0	+	48 58		14.6		
6	53.4	+	50 41		15.6		
6	53.9	+	45 21		15.0		
6	53.9	+	46 29		13.7		
6	54.4	+	47 19		15.6		
6	54.6	+	45 08		14.7		
6	55.0	+	45 17	2308	14.4		
6	55.3	+	45 08		15.5		
6	55.4	+	45 31		14.8		
6	58.0	+	47 38		15.1		
6	58.7	+	50 40	2315	14.5		
6	59.0	+	50 40		14.9		double system, bridges + jets
6	59.2	+	49 30		14.4		
7	00.1	+	50 45		15.5		
7	00.8	+	45 25		15.6		
7	01.2	+	46 13		14.5		
7	01.8	+	50 40	2320	13.9		
7	01.9	+	48 26		15.1		
7	02.0	+	45 48		15.6		
7	02.1	+	50 35	2322	14.6		
7	02.1	+	50 50	2321	14.8		
7	02.8	+	46 13		15.1		
7	02.8	+	48 34		15.1		
7	03.2	+	50 28		15.3		
7	03.5	+	48 25		15.6		
7	03.8	+	48 58		14.8		
7	04.0	+	48 29		15.7		
7	04.1	+	47 06		15.6		
7	04.2	+	48 44		14.6		
7	04.3	+	50 45	2326	14.3		
7	04.4	+	49 00		15.5		
7	04.4	+	49 13		15.1		
7	04.5	+	46 12		14.1		
7	04.5	+	50 12		15.5		very compact
7	04.7	+	48 12		15.6		
7	04.7	+	50 42		15.5		
7	05.0	+	49 04		15.1		
7	05.1	+	48 31		15.1		
7	05.3	+	48 39		15.6		
7	05.4	+	48 42	2329	13.7		
7	05.4	+	49 54		15.5		
7	05.5	+	46 11		14.7		
7	05.6	+	48 43		13.8		
7	05.6	+	50 13	457*	15.7		
7	05.7	+	50 15	2332	14.0		
7	05.9	+	46 10		15.3		
7	05.9	+	48 00		15.2		
7	05.9	+	48 46		15.2		very compact
7	06.1	+	47 59		14.7		double system, bridge + jet
7	06.7	+	49 56		15.3		
7	06.7	+	50 11	458*	14.4		
7	06.8	+	50 14	459*	15.5		extremely compact
7	06.9	+	50 09	461*	15.7		
7	06.9	+	50 16	460*	15.4		compact
7	07.0	+	48 16		15.5		
7	07.0	+	49 59		15.4		compact

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
7 07.1		+ 50 13	464*	14.8		
7 07.2		+ 48 35		15.1		double system
7 07.2		+ 48 45		15.3		
7 07.2		+ 49 05		15.2		
7 07.2		+ 50 15	2340	13.9		
7 07.3		+ 49 58		15.7		diffuse spiral
7 07.7		+ 48 19		14.5		
7 07.7		+ 49 10		15.4		
7 07.7		+ 50 19	465*	14.6		compact
7 07.9		+ 47 01		15.3		compact
7 07.9		+ 49 56		14.2		
7 08.2		+ 50 40		14.9		
7 08.4		+ 46 18	2344	15.7		
7 08.7		+ 47 15		13.2		
7 08.9		+ 50 08		15.6		compact
7 09.1		+ 49 05		15.0		
7 09.1		+ 49 51		15.2		
7 09.2		+ 45 53		15.7		
7 09.8		+ 50 06		14.9		
7 09.8		+ 50 48		15.1		
7 10.0		+ 50 20		15.5		
7 10.1		+ 50 28		14.6		
7 10.4		+ 46 05		15.6		
7 11.0		+ 46 52		15.6		
7 11.2		+ 50 37		14.2		compact
7 11.5		+ 45 50		15.4		compact
7 11.9		+ 49 42		15.7		
7 12.5		+ 48 21		15.6		
7 13.0		+ 49 58		15.7		



FIELD No. 235

$7^{\text{h}}29^{\text{m}}$  +  $47^{\circ}30'$

Survey Plate No. 670

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
9681	7	14	44.3	+	49	33 22	4.80
9769	7	17	40.6	+	45	19 22	5.64
9949	7	24	29.4	+	46	37 29	6.78
9965	7	25	08.4	+	48	17 15	5.57
10168	7	32	54.2	+	46	17 33	5.80
10305	7	37	31.2	+	48	15 01	5.77

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0700.4 + 4801	medium compact	1273	36.4	Near	5
0710.5 + 4222	medium compact	575	18.6	Near	21
0712.4 + 4523	medium compact	111	5.1	MD	18
0713.1 + 4717	compact	73	1.1	VD	6
0716.0 + 4445	medium compact	102	2.2	D	20
0720.5 + 4505	medium compact	68	3.2	D	17
0720.7 + 4606	medium compact	56	1.7	ED	25
0721.2 + 5043	medium compact	86	3.4	D	24
0725.3 + 4520	medium compact	143	6.2	MD	11
0725.6 + 4612	medium compact	66	1.5	VD	16
0729.2 + 4734	open	103	6.8	MD	15
0731.0 + 4616	medium compact	73	3.0	D	4
0731.7 + 4515	compact	104	1.7	VD	14
0732.3 + 4442	medium compact	55	2.8	MD	19
0735.0 + 4533	open	151	6.5	MD	13
0736.3 + 4805	medium compact	80	4.9	D	3
0738.0 + 4431	open	139	8.2	D	22
0738.7 + 4449	medium compact	56	1.9	D	10
0739.8 + 4949	medium compact	250	15.3	Near	1
0740.8 + 4542	medium compact	76	1.6	VD	9
0741.0 + 4752	medium compact	62	1.2	VD	8
0741.9 + 4824	medium compact	89	3.5	MD	2
0742.9 + 4659	compact	85	1.3	VD	12
0744.4 + 4733	medium compact	112	2.1	VD	23
0744.9 + 4551	medium compact	92	2.4	D	7

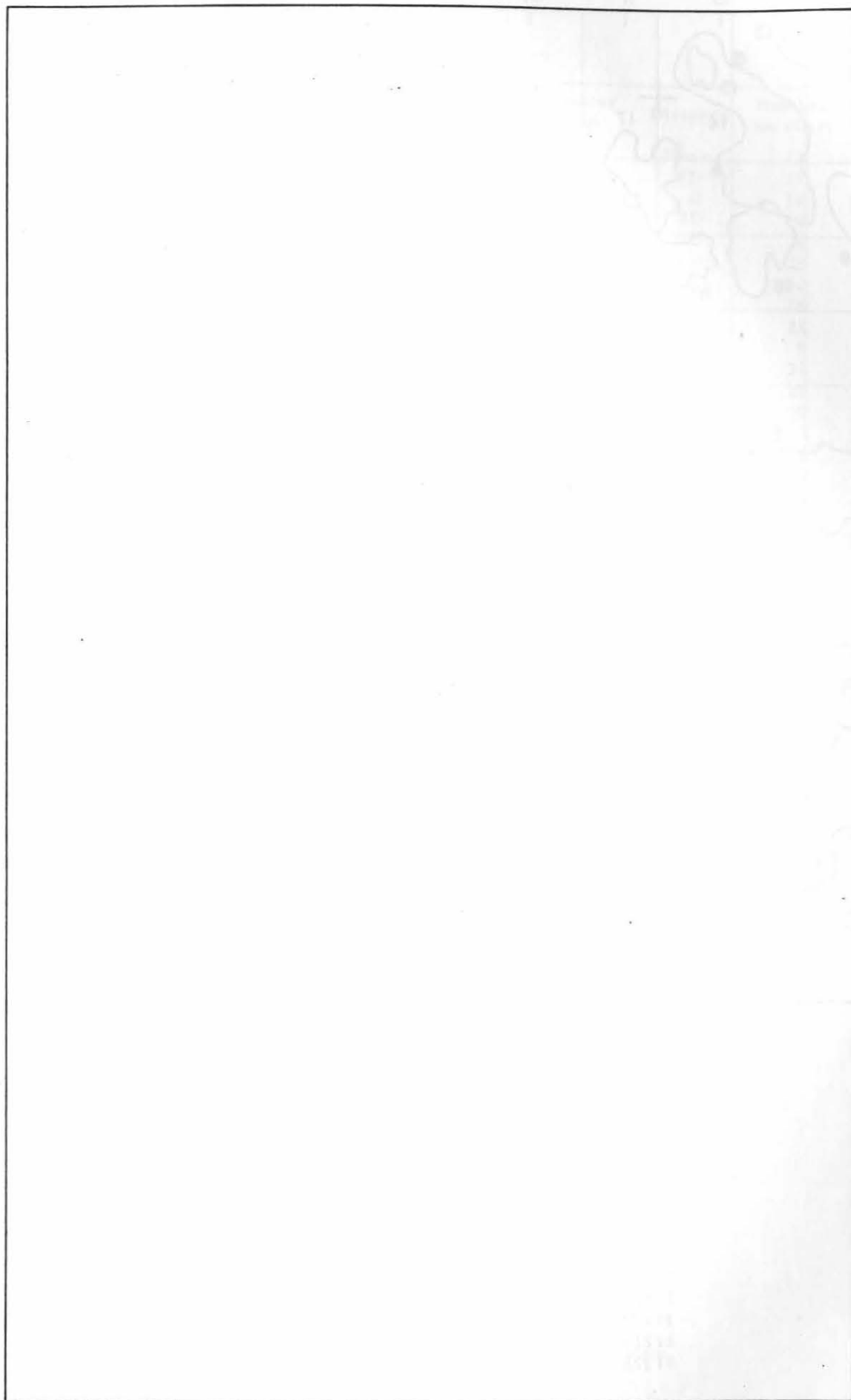
Average number of galaxies per cluster = 163.2

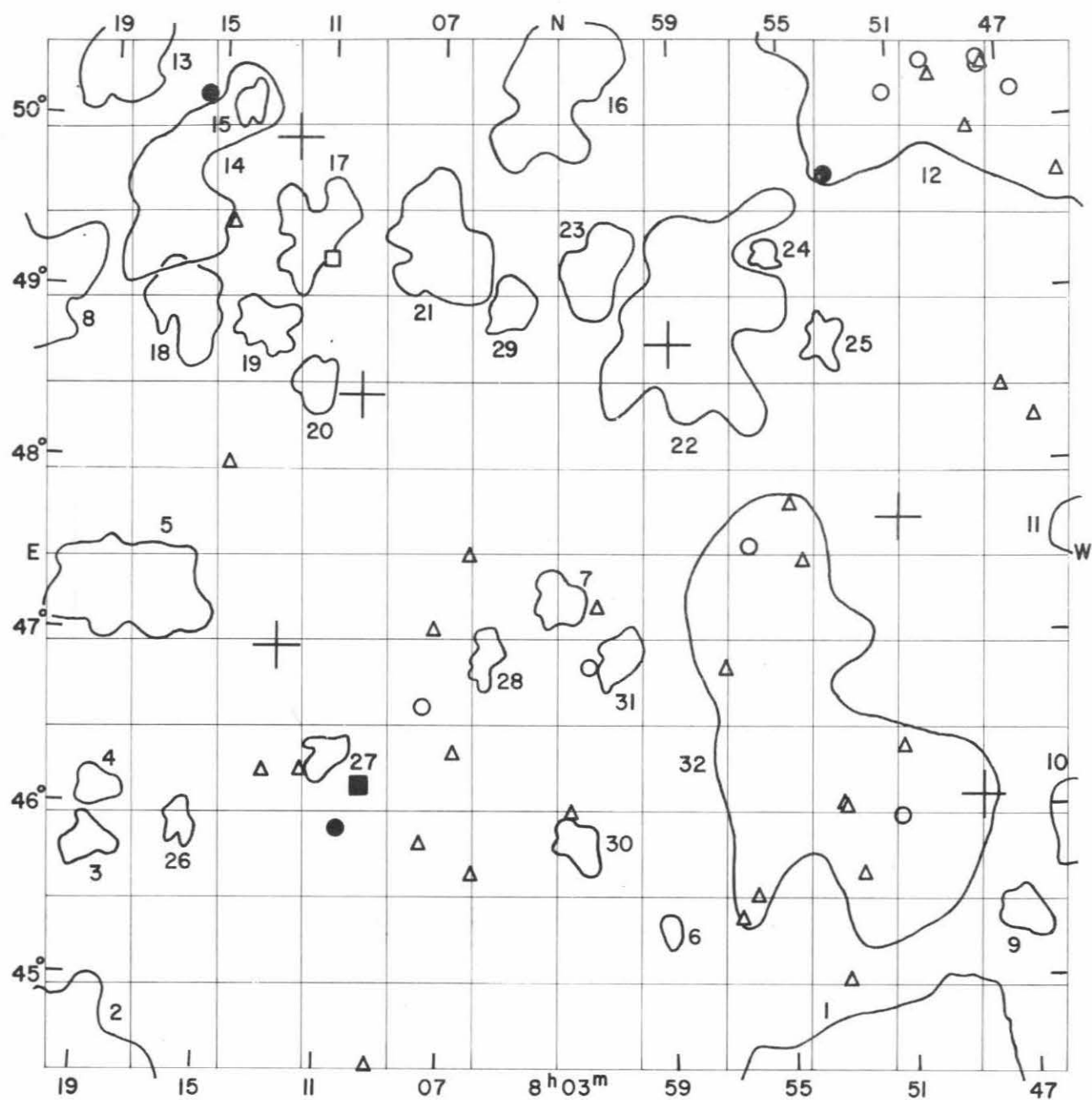
## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
7	11.9	+49 42		15.7		
7	12.5	+48 21		15.6		
7	13.0	+49 58		15.7		
7	13.7	+45 53		15.7		
7	15.1	+49 18		15.5		
7	16.0	+49 57		15.4		
7	16.8	+49 11		15.0		
7	18.1	+46 56		15.3		system with jet
7	18.5	+49 23		14.4		
7	20.6	+49 23		15.5		compact
7	21.2	+49 35		13.6		
7	21.8	+46 00		15.6		
7	22.1	+44 55		15.5		
7	22.5	+49 03		15.1		
7	23.0	+47 12		13.6		
7	23.1	+48 48		15.2		
7	23.6	+48 23		15.5		
7	25.1	+49 14		13.9		
7	26.6	+49 37		15.6		very diffuse
7	26.8	+49 27		15.6		
7	30.1	+49 24		15.3		
7	34.2	+46 31		15.7		very diffuse spiral
7	35.8	+49 27		14.9		

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
7	36.0	+48 51		14.9		diffuse spiral
7	36.4	+49 25		15.5		compact
7	36.5	+49 23		15.0		
7	37.3	+49 30		15.4		
7	37.5	+47 47		15.6		extremely diffuse
7	38.8	+49 18		14.7		
7	38.8	+49 55		13.3		
7	39.3	+50 23		15.6		
7	39.5	+45 28		15.6		very compact
7	39.9	+49 46	471*	14.2		
7	40.1	+49 43	472*	14.5		
7	41.5	+46 11		14.8		
7	41.9	+45 54		15.5		
7	42.3	+48 57		15.5		compact
7	42.6	+46 30		15.7		
7	42.6	+46 51		15.7		
7	42.7	+48 26		14.6		
7	43.0	+44 54		14.3		double system
7	43.3	+47 05		15.7		
7	43.8	+47 59		15.7		
7	44.0	+48 20		15.5		
7	44.9	+49 40		15.6		
7	45.0	+44 48		15.5		
7	46.1	+48 15		15.4		
7	46.4	+50 10		15.0		
7	47.5	+50 18		15.4		
7	47.6	+50 17		14.4		
7	47.6	+50 21		14.1		double system in halo







FIELD No. 236

8<sup>h</sup>03<sup>m</sup> + 47°30'

Survey Plate No. 1317

#### GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	°	'	"	
10603	7	48	29.0	+	46	03 44	6.53
10666	7	51	04.7	+	47	41 46	5.69
10879	7	59	03.1	+	48	43 58	7.58
11157	8	09	51.2	+	48	25 56	6.75
11216	8	12	18.6	+	49	55 32	8.4
11228	8	12	36.8	+	46	57 22	6.99

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0739.8 + 4949	medium compact	250	15.3	Near	12
0744.4 + 4733	medium compact	112	2.1	VD	11
0744.9 + 4551	medium compact	92	2.4	D	10
0747.3 + 4522	medium compact	75	1.6	VD	9
0749.3 + 4402	open	193	9.7	MD	1
0753.6 + 4844	compact	63	1.4	ED	25
0754.0 + 4619	open	125	10.0	Near	32
0755.5 + 4915	compact	54	0.9	ED	24
0758.0 + 4852	open	108	5.7	MD	22
0759.0 + 4519	compact	66	0.8	ED	6
0800.9 + 4653	medium compact	107	1.5	ED	31
0801.7 + 4908	compact	122	2.4	ED	23
0802.2 + 4547	compact	102	1.5	ED	30
0802.9 + 4714	medium compact	118	1.7	ED	7
0803.2 + 5012	medium compact	90	3.9	D	16
0804.8 + 4856	compact	81	1.5	ED	29
0805.4 + 4654	medium compact	65	1.3	VD	28
0807.1 + 4918	medium compact	117	3.4	VD	21
0810.8 + 4618	compact	71	1.3	ED	27
0811.6 + 4828	compact	66	1.4	VD	20
0811.6 + 4921	medium compact	116	2.5	VD	17
0813.3 + 4848	compact	98	1.9	ED	19
0814.1 + 5005	compact	74	1.1	ED	15
0815.7 + 4555	compact	67	1.1	ED	26
0816.2 + 4853	medium compact	106	2.5	D	18
0816.2 + 4937	medium compact	80	4.6	MD	14
0817.7 + 4715	medium compact	124	3.9	D	5
0818.5 + 4605	medium compact	79	1.2	ED	4
0818.9 + 4546	medium compact	98	1.5	ED	3
0818.9 + 5021	open	65	2.9	VD	13
0819.9 + 4424	medium compact	176	6.1	D	2
0822.7 + 4903	medium compact	138	5.1	D	8

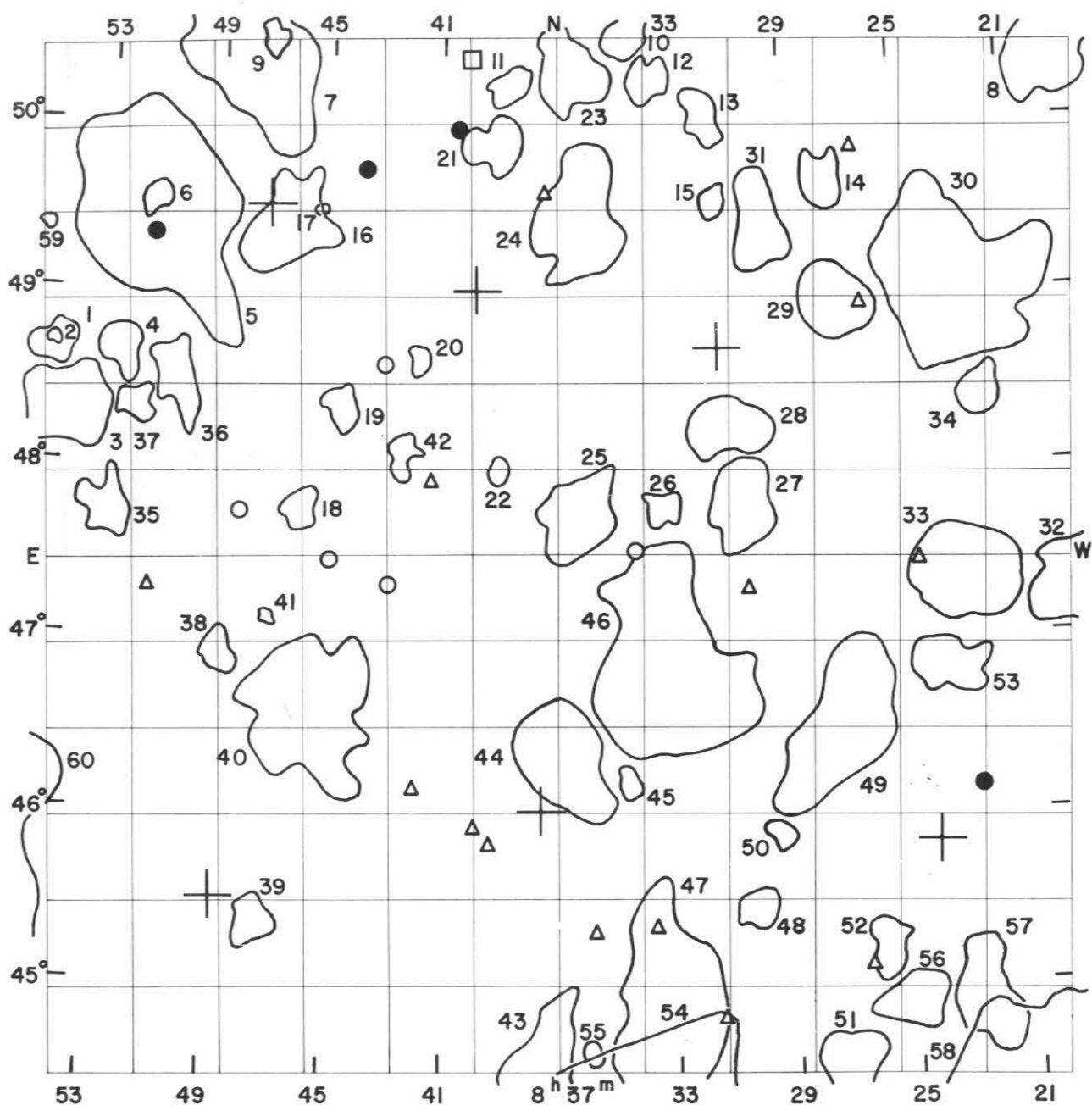
Average number of galaxies per cluster = 103.1

## GALAXIES

Position a 1950 $\delta$ h m o	NGC IC*	$m_p$	$V_s$ km/sec	Remarks
7 44.9 + 49 40		15.6		
7 46.1 + 48 15		15.4		
7 46.4 + 50 10		15.0		
7 47.3 + 48 27		15.7		compact
7 47.5 + 50 18		15.4		
7 47.6 + 50 17		14.4		
7 47.6 + 50 21		14.1		double system in halo
7 48.2 + 49 57		15.1		compact
7 49.4 + 50 15		15.3		
7 49.7 + 50 21		14.9		
7 51.1 + 50 10		14.5		
7 51.2 + 46 21		15.7		diffuse
7 51.3 + 45 58		14.8		
7 52.6 + 45 37		15.7		
7 53.1 + 45 00		15.5		double system
7 53.1 + 46 01		15.7		







FIELD No. 237

$8^{\text{h}}37^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 671

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
11534	8	24	08.0	+	45	49 24	6.33
11738	8	31	20.5	+	48	42 23	6.76
11903	8	37	34.3	+	46	00 39	5.52
11974	8	39	53.7	+	49	02 33	7.49
12181	8	47	11.1	+	49	32 00	8.32
12226	8	48	48.2	+	45	30 06	6.08

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0817.7 + 4715	medium compact	124	3.9	D	32
0818.9 + 5021	open	65	2.9	VD	8
0819.9 + 4424	medium compact	176	6.1	D	58
0822.1 + 4824	medium compact	84	1.4	VD	34
0822.7 + 4454	medium compact	65	2.5	ED	57
0822.7 + 4903	medium compact	138	5.1	D	30
0822.8 + 4722	compact	196	3.3	D	33
0823.5 + 4649	medium compact	63	2.0	VD	53
0825.0 + 4453	compact	73	2.0	VD	56
0825.9 + 4512	medium compact	59	1.4	VD	52
0827.0 + 4856	medium compact	113	2.2	D	29
0827.3 + 4432	medium compact	81	2.0	VD	51
0827.3 + 4628	medium compact	121	3.8	D	49
0827.4 + 4940	medium compact	83	1.5	VD	14
0829.4 + 4552	medium compact	72	0.8	ED	50
0829.6 + 4923	open	106	2.3	D	31
0830.2 + 4526	compact	75	1.3	ED	48
0830.5 + 4746	open	59	2.3	VD	27
0830.9 + 4814	medium compact	91	2.0	D	28
0831.4 + 4932	medium compact	60	0.9	ED	15
0831.7 + 5001	medium compact	102	1.3	ED	13
0833.0 + 4650	open	132	5.4	D	46
0833.1 + 4452	medium compact	117	4.7	D	47
0833.3 + 4746	medium compact	93	1.2	ED	26
0833.6 + 5015	medium compact	83	1.4	VD	12
0834.4 + 5031	medium compact	116	1.4	ED	10
0834.5 + 4610	compact	54	0.8	ED	45
0835.8 + 4436	medium compact	48	0.7	ED	55
0836.1 + 4925	medium compact	123	3.5	VD	24
0836.2 + 4744	open	87	2.4	VD	25
0836.3 + 4147	open	550	27.6	Near	54
0836.4 + 5017	medium compact	105	2.2	VD	23
0836.8 + 4618	open	93	3.4	VD	44
0837.4 + 4431	open	94	2.8	D	43
0838.6 + 5013	compact	105	1.2	ED	11
0839.0 + 4800	compact	72	0.7	ED	22
0839.1 + 4952	medium compact	83	1.7	D	21
0841.7 + 4838	medium compact	57	0.8	ED	20
0842.3 + 4805	medium compact	61	1.1	ED	42
0844.4 + 4820	medium compact	65	1.2	VD	19
0845.2 + 4929	compact	52	0.3	ED	17
0845.3 + 4635	open	95	4.2	D	40
0845.9 + 4745	medium compact	102	1.2	ED	18
0846.5 + 4923	medium compact	85	2.9	VD	16
0847.0 + 4707	compact	43	0.4	ED	41
0847.2 + 4522	medium compact	77	1.4	ED	39
0847.2 + 5029	medium compact	53	0.9	ED	9
0847.8 + 5020	open	102	4.4	VD	7
0848.6 + 4655	medium compact	77	1.2	ED	38
0850.2 + 4829	open	92	1.8	VD	36
0851.1 + 4925	medium compact	110	6.0	Near	5
0851.2 + 4932	compact	65	1.0	VD	6
0851.7 + 4820	medium compact	103	1.1	ED	37
0852.2 + 4840	medium compact	81	1.4	VD	4
0852.7 + 4745	medium compact	64	1.6	VD	35
0854.1 + 4819	open	95	2.8	D	3
0854.6 + 4841	medium compact	63	1.3	VD	1
0854.7 + 4843	compact	52	0.4	ED	2

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0855.1 + 4922	compact	39	0.4	ED	59
0856.3 + 4554	open	105	6.8	Near	60

Average number of galaxies per cluster = 95.0

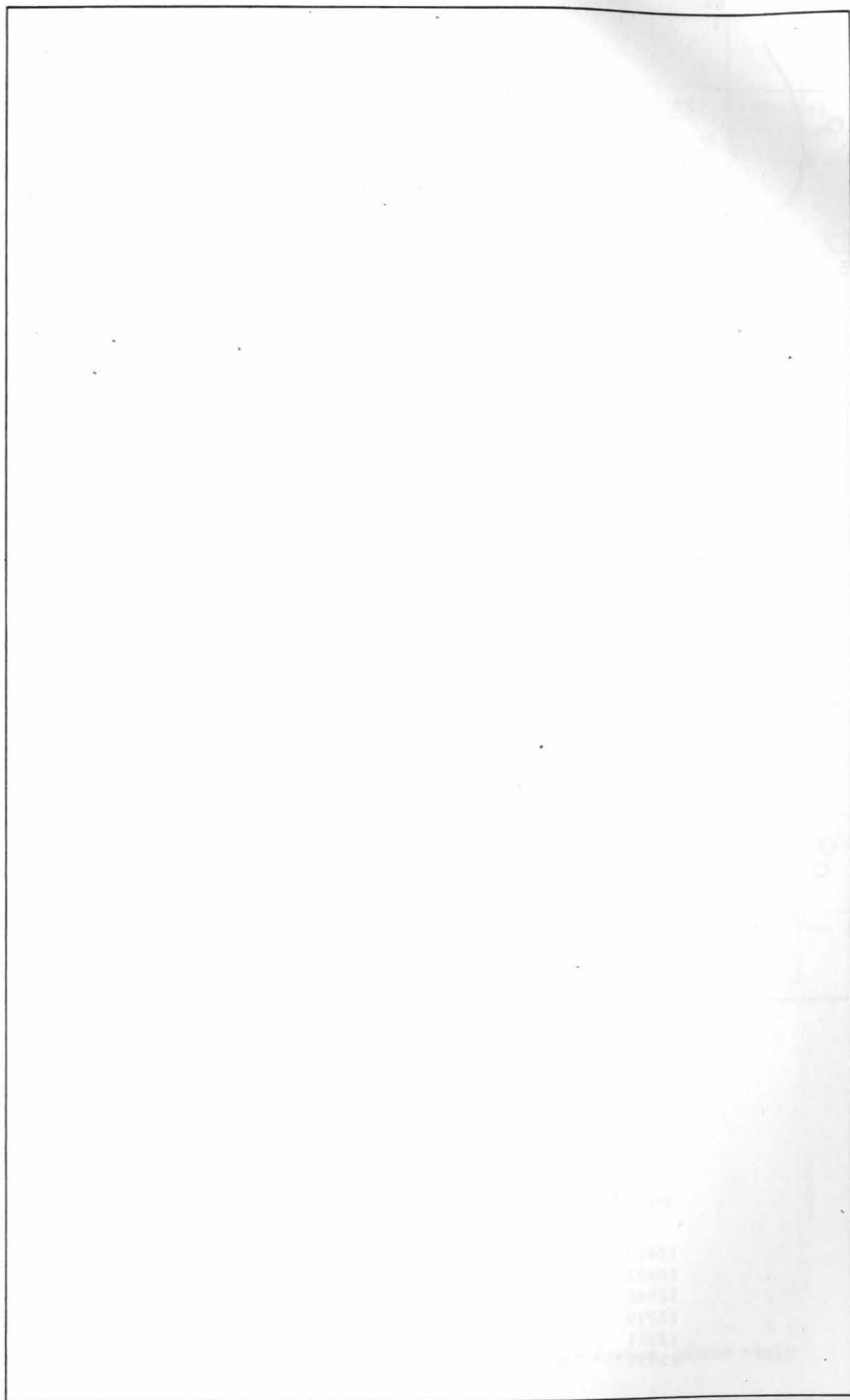
#### GALAXIES

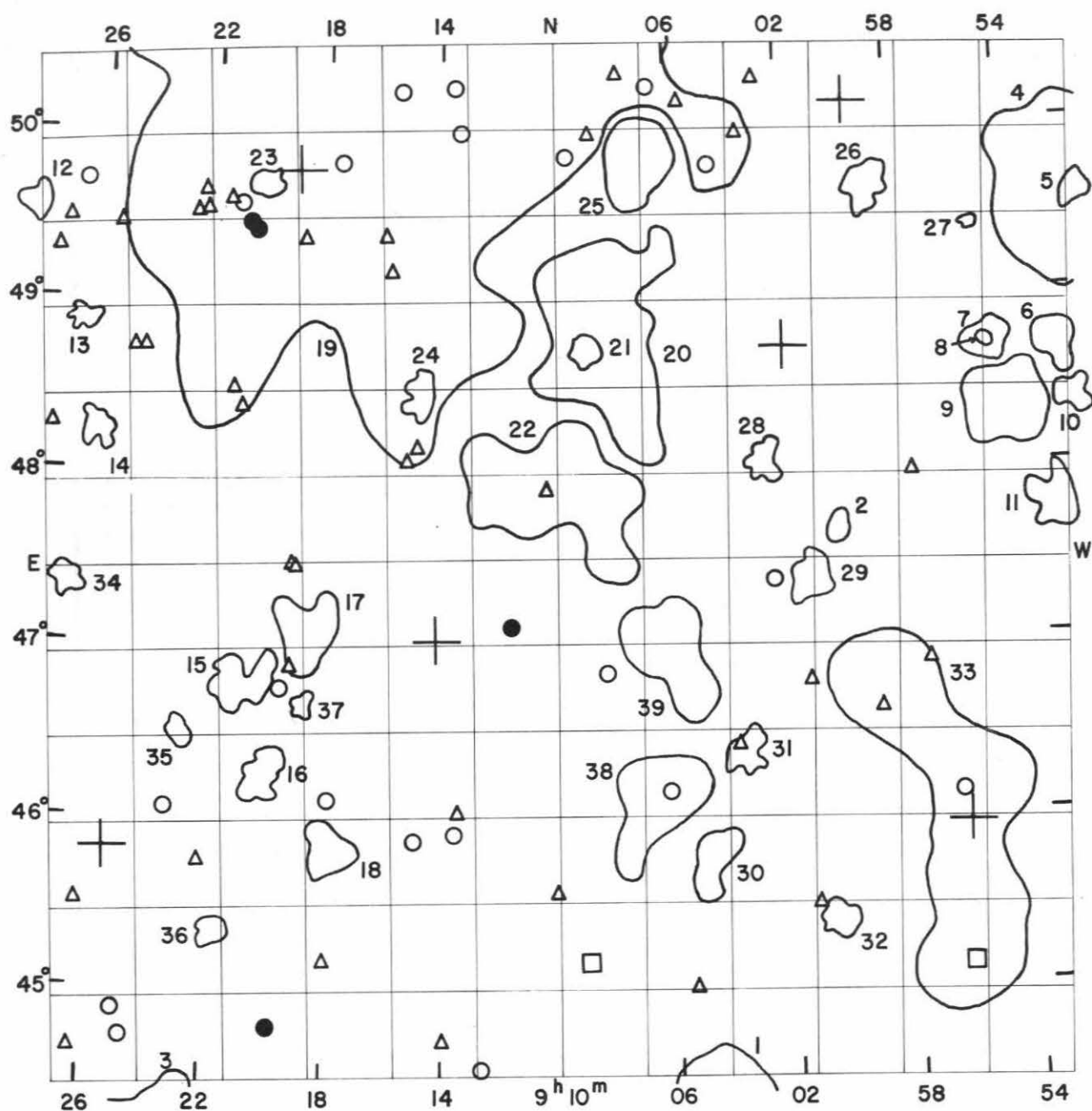
Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
8	22.6	+46 08		13.6		
8	24.5	+47 27		15.6		
8	26.2	+48 56		15.5		
8	26.4	+49 51		15.6		
8	26.5	+45 06		15.4		very compact
8	30.4	+47 18		15.7		
8	31.4	+44 48		15.7		
8	33.7	+45 20		15.5		
8	34.3	+47 31		15.0		
8	35.7	+45 18		15.3		
8	37.4	+49 36		15.7		
8	39.4	+45 50		15.2		
8	39.9	+45 55		15.1		extremely diffuse spiral
8	40.0	+50 22	2639	12.4	+ 3314	m <sub>H</sub> = 12.4
8	40.5	+49 58		13.1		
8	41.4	+47 55		15.4		diffuse spiral
8	42.0	+46 08		15.6		
8	42.8	+47 20		14.7		double system, bridge + jet
8	43.0	+48 37		14.5		
8	43.7	+49 44		13.8		
8	44.9	+47 28		14.8		
8	48.0	+47 44	2676	14.3		
8	51.2	+47 17		15.5		very diffuse
8	51.3	+49 20	2684	13.4		

#### MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2639	-	-	12.56	Sa	12.6	Sa	-	-







FIELD No. 238

$9^h 10^m + 47^\circ 30'$

Survey Plate No. 1004

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
12410	8	56	01.5	+	45	56 02	6.61
12492	8	59	33.2	+	50	08 47	6.81
12540	9	01	57.7	+	48	43 50	5.59
12799	9	14	10.5	+	47	01 37	5.70
12911	9	19	08.3	+	49	45 32	6.86
13051	9	25	23.9	+	45	49 19	5.56

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0851.1 + 4925	medium compact	110	6.0	Near	4
0851.2 + 4932	compact	65	1.0	VD	5
0851.7 + 4820	medium compact	103	1.1	ED	10
0852.2 + 4840	medium compact	81	1.4	VD	6
0852.7 + 4745	medium compact	64	1.6	VD	11
0854.1 + 4819	open	95	2.8	D	9
0854.6 + 4841	medium compact	63	1.3	VD	7
0854.7 + 4843	compact	52	0.4	ED	8
0855.1 + 4922	compact	39	0.4	ED	27
0856.3 + 4554	open	105	6.8	Near	33
0858.7 + 4937	compact	67	1.3	ED	26
0900.2 + 4739	medium compact	62	0.9	ED	2
0900.6 + 4521	compact	62	1.1	ED	32
0901.2 + 4722	medium compact	75	1.3	ED	29
0902.8 + 4802	compact	71	1.1	ED	28
0903.6 + 4625	medium compact	80	1.2	VD	31
0904.9 + 4543	compact	130	1.6	VD	30
0905.0 + 4351	medium compact	153	5.9	MD	1
0906.1 + 4656	open	84	2.9	ED	39
0906.7 + 4603	medium compact	126	2.9	VD	38
0907.0 + 4948	open	90	2.3	D	25
0908.3 + 4847	medium compact	152	5.2	D	20
0909.0 + 4842	compact	70	1.0	ED	21
0909.9 + 4752	medium compact	99	4.5	MD	22
0914.8 + 4827	medium compact	74	1.1	ED	24
0916.7 + 4952	open	199	15.7	Near	19
0917.9 + 4548	compact	94	1.6	ED	18
0918.6 + 4703	compact	161	2.2	ED	17
0918.8 + 4637	compact	50	0.5	ED	37
0920.2 + 4613	medium compact	101	1.4	ED	16
0920.3 + 4940	medium compact	56	0.9	ED	23
0920.9 + 4644	compact	146	1.7	VD	15
0921.7 + 4520	medium compact	71	0.9	ED	36
0923.0 + 4628	medium compact	58	0.9	ED	35
0923.9 + 4410	medium compact	192	2.7	VD	3
0926.0 + 4813	compact	64	1.0	ED	14
0926.7 + 4851	compact	56	0.8	ED	13
0927.0 + 4721	medium compact	68	1.0	ED	34
0928.6 + 4932	compact	72	1.0	ED	12

Average number of galaxies per cluster = 91.3

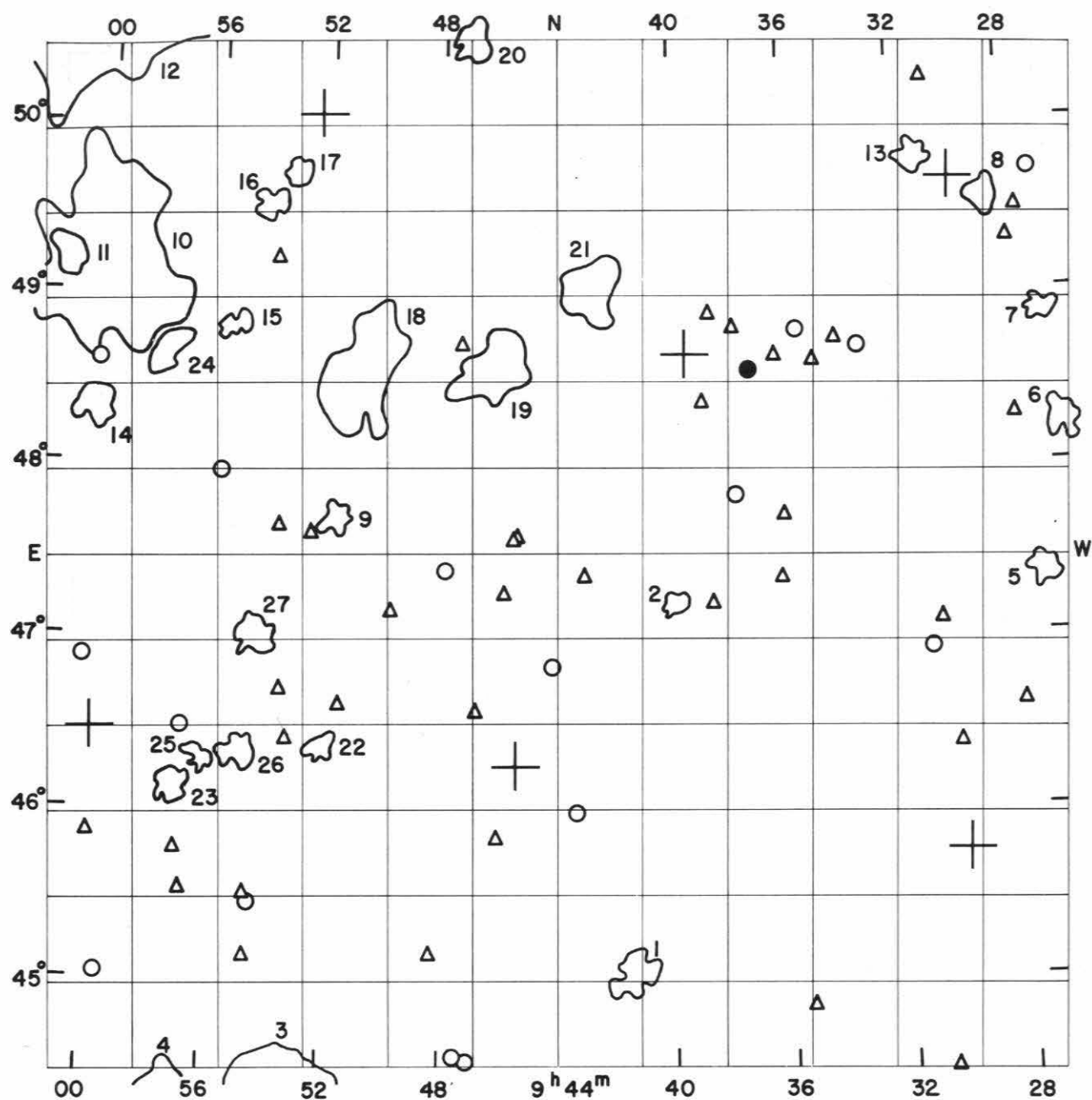
## GALAXIES

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
8	56.2	+45 06	2712	12.3	+1840	$m_H = 12.7$ Sc
8	56.2	+46 08		14.5		
8	57.3	+46 53		15.3		
8	57.6	+48 00		15.6		
8	58.9	+46 37		15.7		
9	01.2	+45 29		15.7		
9	01.4	+46 47		15.7		
9	02.5	+47 23		14.5		double system, plume + halo
9	02.8	+50 17		15.6		

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
9	03.5	+49	58		15.4		
9	03.9	+46	25		15.6		compact, brightest of 3
9	04.5	+49	48		15.0		triple system in halo
9	05.5	+45	00		15.2		
9	05.6	+50	10		15.6		
9	06.2	+46	10		14.6		
9	06.7	+50	15		14.4		double system
9	07.8	+50	20		15.7		
9	08.4	+46	51		14.3		compact
9	08.8	+49	58		15.5		
9	09.0	+45	10	2776	12.1	+ 2673	m <sub>H</sub> = 12.2 Sc
9	09.6	+49	50		14.1		
9	10.1	+45	34		15.6		
9	10.4	+47	55		15.7		double system
9	11.6	+47	07		14.0		
9	12.7	+44	33		14.9		double system, twisted streamer
9	13.4	+49	59		14.9		compact
9	13.5	+46	02		15.4		double nebula
9	13.6	+45	55		14.8		eruptive galaxy
9	13.6	+50	15		14.9		system with plume + jets
9	14.0	+44	42		15.1		
9	14.9	+48	10		15.5		
9	15.0	+45	52		14.4		
9	15.2	+48	05		15.1		very diffuse spiral
9	15.5	+50	13		14.7		compact
9	15.8	+49	10		15.4		
9	16.0	+49	22		15.6		compact
9	17.6	+49	48		15.0		
9	17.8	+46	06		14.8		
9	17.9	+45	10		15.5		
9	18.9	+49	22		15.7		
9	19.0	+47	27		15.6		
9	19.1	+47	28		15.7		compact
9	19.3	+46	52		15.5		
9	19.6	+46	45		15.0		
9	19.8	+44	46		14.0		
9	20.6	+49	25	2854	13.8		
9	20.8	+49	27	2856	13.9		
9	21.0	+48	23		15.7		
9	21.2	+49	34	2857	14.3		
9	21.3	+48	30		15.2		
9	21.6	+49	35		15.6		very compact
9	22.2	+45	45		15.3		
9	22.4	+49	32		15.6		double system
9	22.5	+49	38		15.5		double system
9	22.7	+49	30		15.4		
9	23.3	+46	05		14.2		
9	24.5	+48	44		15.3		
9	24.7	+44	44		14.7		
9	24.9	+48	43		15.2		
9	25.0	+44	53		14.3		
9	25.5	+49	26		15.7		
9	26.3	+44	39		15.1		
9	26.3	+45	30		15.7		
9	26.8	+49	42		14.6		
9	27.4	+49	28		15.4		very compact
9	27.7	+49	17		15.3		
9	27.8	+48	15		15.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2712	-	-	12.84	SBb	12.8	SBb	-	-
2776	-	-	12.24	Sc	11.9	Sc	-	-



FIELD No. 239

$9^{\text{h}}44^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 672

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
13162	9	29	46.3	+ 49 39 37	6.50
13166	9	29	56.5	+ 45 44 11	6.61
13379	9	39	26.5	+ 48 39 36	6.34
13497	9	45	22.5	+ 46 15 18	5.20
13643	9	52	27.8	+ 50 03 25	5.34
13794	9	59	57.2	+ 46 26 19	7.86

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0926.0 + 4813	compact	64	1.0	ED	6
0926.7 + 4851	compact	56	0.8	ED	7
0927.0 + 4721	medium compact	68	1.0	ED	5
0928.6 + 4932	compact	72	1.0	ED	8
0931.1 + 4947	medium compact	68	1.0	VD	13
0939.8 + 4714	compact	73	0.7	ED	2
0941.4 + 4502	compact	84	1.3	ED	1
0942.9 + 4902	medium compact	149	1.8	ED	21
0946.2 + 4835	medium compact	201	2.2	ED	19
0947.0 + 5030	medium compact	92	1.2	ED	20
0950.8 + 4833	open	144	3.0	D	18
0951.7 + 4742	compact	70	0.9	ED	9
0952.0 + 4622	medium compact	51	0.9	ED	22
0952.7 + 4413	open	119	4.1	MD	3
0953.2 + 4942	medium compact	81	0.9	ED	17
0954.3 + 4931	medium compact	89	0.9	ED	16
0954.4 + 4701	medium compact	71	1.2	ED	27
0954.9 + 4620	medium compact	83	1.1	VD	26
0955.4 + 4848	medium compact	73	0.8	ED	15
0956.2 + 4618	medium compact	67	0.8	ED	25
0956.9 + 4411	medium compact	84	2.3	D	4
0957.1 + 4607	compact	62	1.1	ED	23
0957.8 + 4838	medium compact	82	1.2	ED	24
1000.1 + 4911	open	164	5.3	D	10
1000.3 + 4820	medium compact	68	1.3	ED	14
1001.4 + 4912	medium compact	110	1.2	VD	11
1012.8 + 5337	open	685	28.3	Near	12

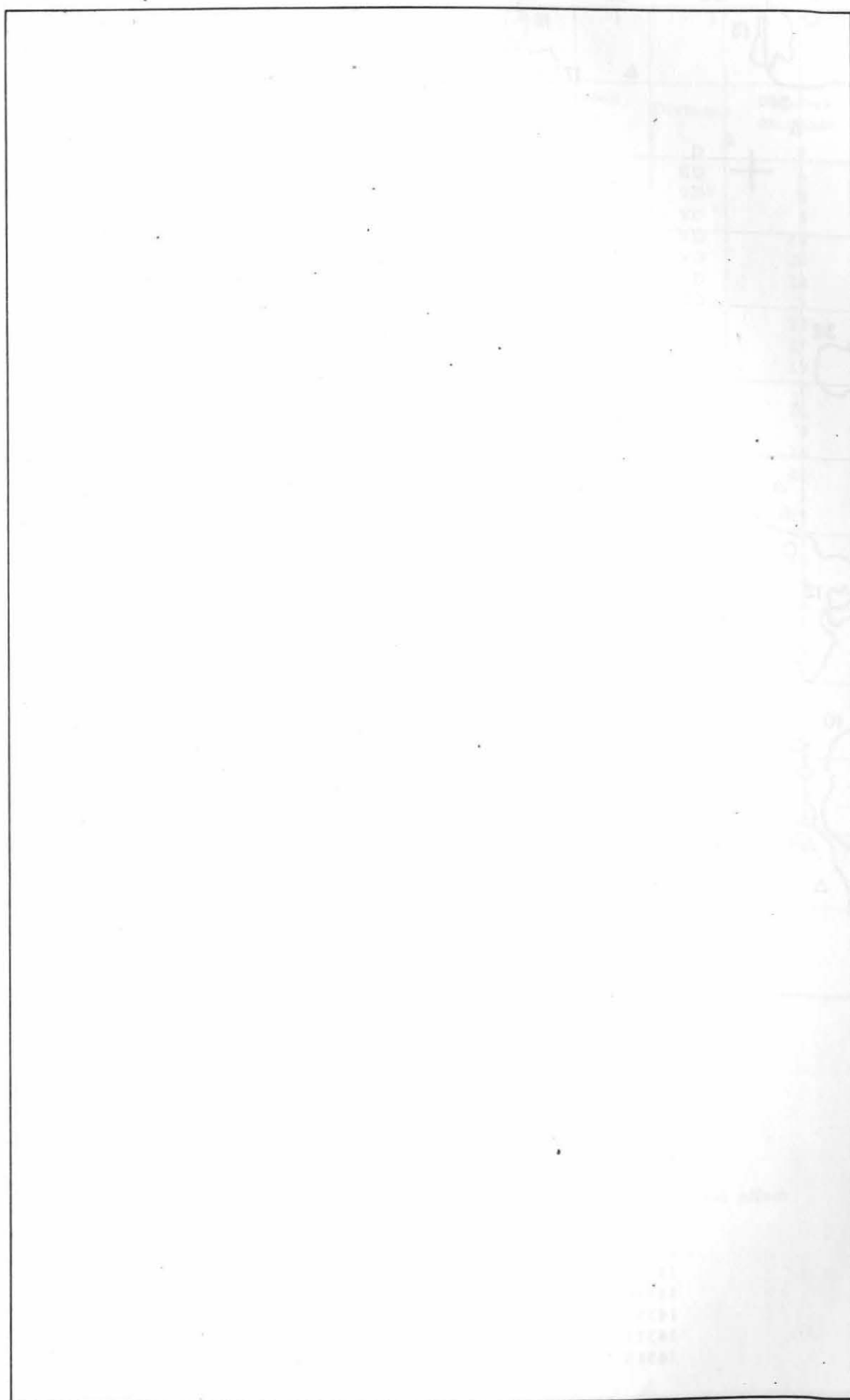
Average number of galaxies per cluster = 112.2

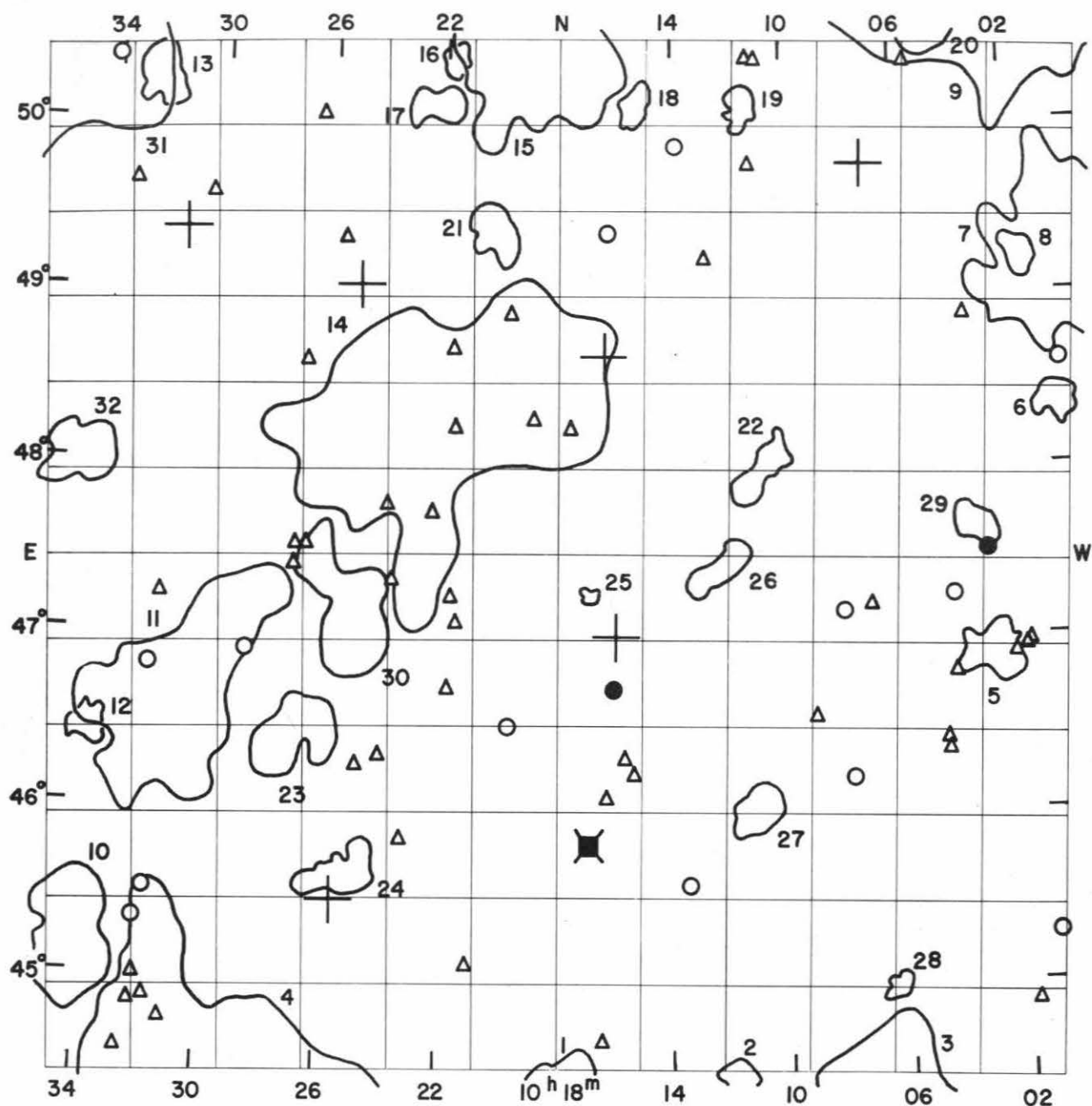
## GALAXIES

Position a 1950 $\delta$ h m o	NGC IC*	$m_p$	$V_s$ km/sec	Remarks
9 26.8 + 49 42		14.6		
9 27.4 + 49 28		15.4		very compact
9 27.7 + 49 17		15.3		
9 27.8 + 46 37		15.5		diffuse spiral
9 27.8 + 48 15		15.7		
9 30.1 + 46 23		15.2		
9 30.6 + 47 05		15.6		extremely diffuse spiral
9 30.7 + 44 29		15.1		
9 30.7 + 50 14		15.5		compact, jet
9 31.0 + 46 56		14.7		
9 33.3 + 48 42		15.0		double system
9 34.1 + 48 45		15.7		
9 34.9 + 48 37		15.1		
9 35.4 + 44 52		15.7		
9 35.5 + 48 47		14.7		
9 36.0 + 47 43		15.5		
9 36.1 + 47 21		15.3		
9 36.3 + 48 39		15.1		
9 37.2 + 48 34		13.5		
9 37.7 + 47 50		14.5		
9 37.8 + 48 48		15.3		

Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
9	38.5	+47 12		15.5		diffuse spiral
9	38.6	+48 54		15.6		extremely diffuse spiral
9	38.9	+48 22		15.4		
9	43.0	+47 22		15.4		
9	43.3	+46 00		14.9		
9	44.2	+46 51		15.0		
9	45.3	+47 36		15.7		
9	45.5	+47 35		15.6		
9	45.9	+47 16		15.7		
9	46.1	+45 51		15.5		diffuse
9	46.8	+46 35		15.2		
9	47.0	+44 32	3009	14.5		
9	47.3	+48 43		15.4		compact
9	47.4	+44 34	3010	14.3		triple system 15.3+15.4+15.8
9	47.8	+47 25		15.0		
9	48.2	+45 10		15.5		diffuse spiral
9	49.7	+47 10		15.3		
9	51.5	+46 37		15.6		
9	52.5	+47 37		15.6		
9	53.2	+46 25		15.7		
9	53.6	+46 42		15.1		
9	53.7	+47 39		15.4		
9	53.9	+47 13		15.5		
9	54.4	+45 29		14.4		
9	54.5	+45 08		15.5		
9	54.5	+45 30		15.2		
9	55.7	+47 58		14.4		
9	56.7	+45 31		15.6		double system, 2 bridges
9	56.8	+46 29		14.8		
9	56.9	+45 45		15.6		
9	59.4	+45 02		15.0		
9	59.9	+45 51		15.7		
10	00.2	+48 37		14.9		
10	00.3	+46 52		14.6		







FIELD No. 240

$10^{\text{h}}18^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 1348

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
13955	10	07	06.9	+ 49 45 14	7.22
14145	10	15	54.5	+ 47 00 44	6.48
14154	10	16	21.1	+ 48 38 57	6.15
14357	10	24	59.3	+ 49 03 09	6.50
14377	10	25	36.2	+ 45 28 05	6.49
14515	10	31	18.4	+ 49 21 58	7.12

## CLUSTER OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1000.1 + 4901	open	164	5.3	D	7
1000.3 + 4820	medium compact	68	1.3	ED	6
1001.4 + 4912	medium compact	110	1.2	VD	8
1002.9 + 4655	medium compact	102	1.8	VD	5
1003.3 + 4739	medium compact	80	1.3	VD	29
1004.7 + 5038	medium compact	111	2.3	VD	20
1006.5 + 4459	compact	53	0.7	VD	28
1007.0 + 4413	open	122	4.6	MD	3
1010.9 + 4759	medium compact	111	1.5	ED	22
1011.1 + 4600	compact	83	1.5	VD	27
1011.4 + 5007	medium compact	93	1.1	ED	19
1011.9 + 4428	compact	87	1.1	ED	2
1012.4 + 4725	medium compact	109	1.5	ED	26
1012.8 + 5337	open	685	28.3	Near	9
1015.4 + 5007	medium compact	67	1.1	ED	18
1016.8 + 4716	compact	48	0.5	ED	25
1017.5 + 4410	medium compact	104	3.3	VD	1
1018.8 + 5020	compact	301	4.6	VD	15
1020.3 + 4922	compact	157	1.6	ED	21
1021.8 + 5022	medium compact	67	0.9	ED	16
1022.1 + 4813	open	221	8.9	MD	14
1022.4 + 5006	medium compact	97	1.4	ED	17
1025.1 + 4709	medium compact	141	3.2	D	30
1025.2 + 4537	medium compact	145	1.8	ED	24
1026.9 + 4625	medium compact	166	2.4	ED	23
1028.2 + 4357	open	200	10.3	Near	4
1031.1 + 4635	medium compact	163	5.7	D	11
1032.6 + 5015	medium compact	87	1.7	VD	13
1034.0 + 4626	medium compact	64	1.2	ED	12
1034.2 + 4510	compact	202	3.3	VD	10
1034.8 + 4800	medium compact	96	2.0	ED	32
1035.3 + 5013	medium compact	108	5.5	Near	31

Average number of galaxies per cluster = 137.9

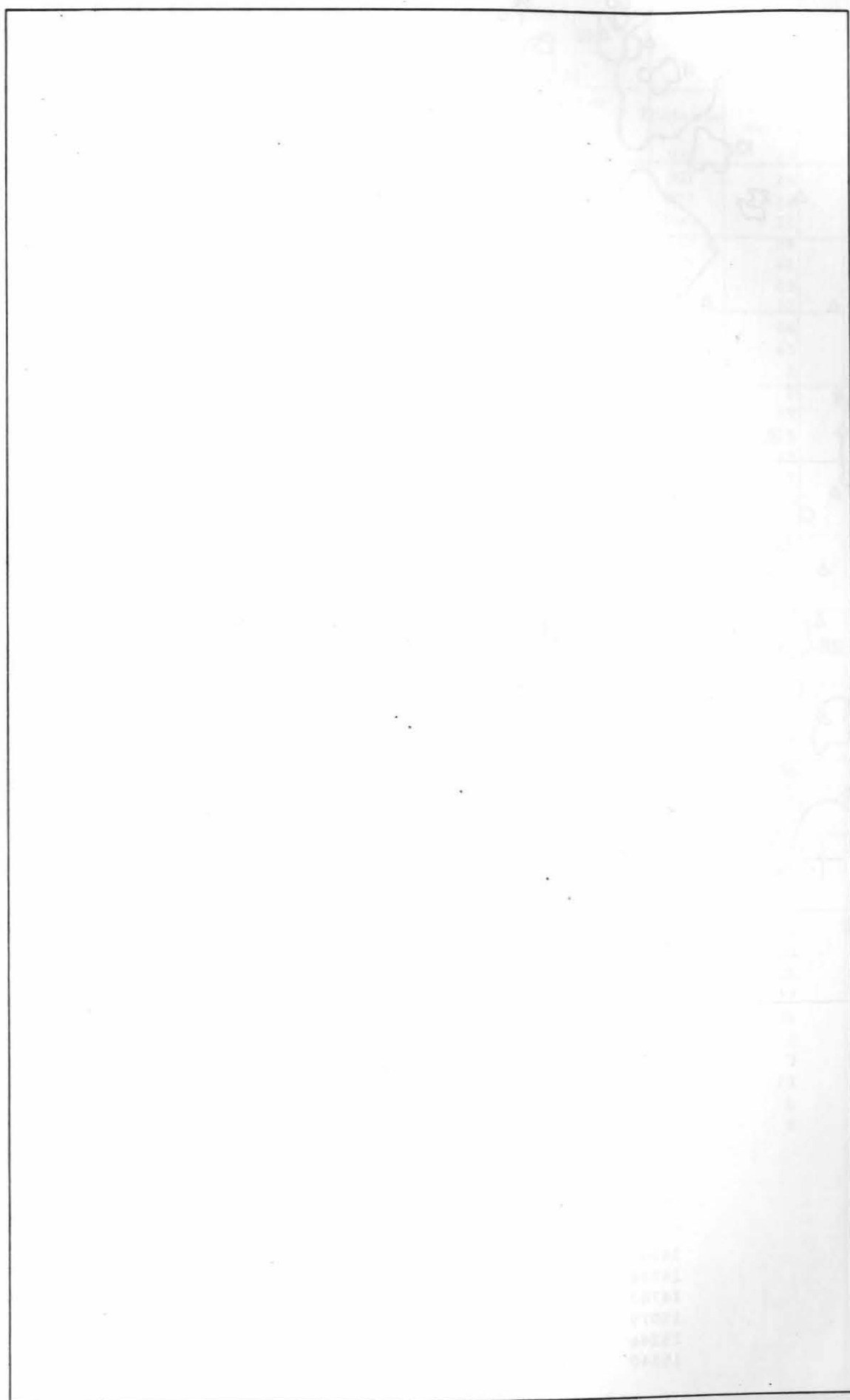
## GALAXIES

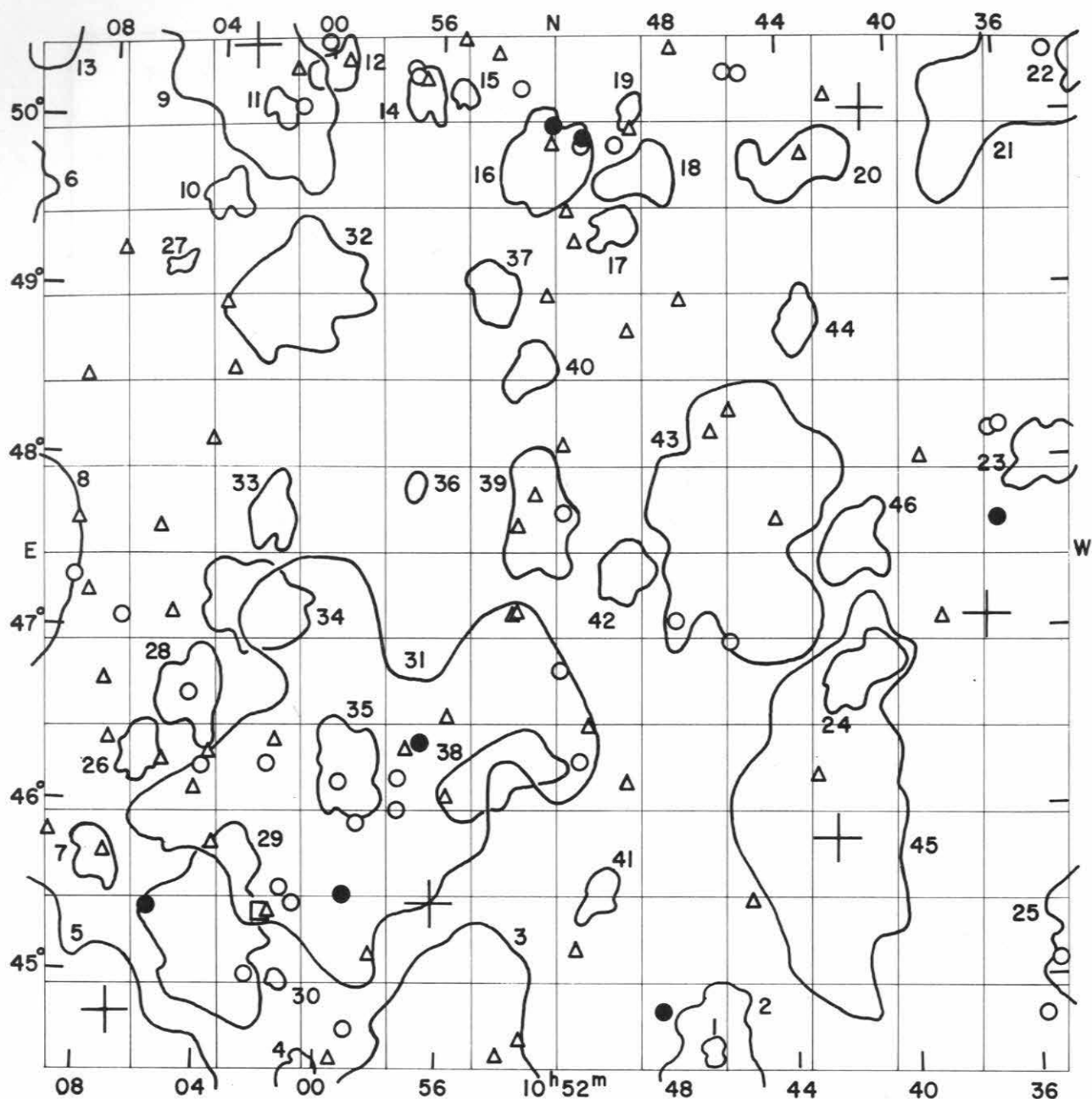
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
10	00.2	+48 37		14.9		
10	01.0	+45 17		14.7		
10	01.6	+46 58		15.4		
10	01.7	+46 56		15.7		
10	01.8	+44 54		15.6		
10	02.0	+46 54		15.5		diffuse
10	03.0	+47 30	3111	14.0		
10	03.6	+48 52		15.7		double system, tidal effect
10	04.2	+46 48		15.1		
10	04.2	+47 16		14.1		
10	04.5	+46 21		15.3		compact
10	04.6	+46 25		15.2		
10	05.5	+50 21		15.4		
10	07.1	+47 13		15.2		
10	07.8	+46 12	3135	14.3		
10	08.0	+47 10		14.6		

a	Position 1950 6			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
	h	m	s				
10	09.1	+46	33		15.5		
10	11.0	+50	23		15.5		
10	11.2	+49	46		15.7		
10	11.3	+50	23		15.7		
10	12.9	+49	13		15.4		
10	13.4	+45	35		15.0		compact
10	13.8	+49	53		14.4		
10	15.3	+46	13		15.3		
10	15.6	+46	18		15.6		double nebula in halo
10	16.0	+46	43	3191	13.9		
10	16.2	+46	05		15.5		
10	16.3	+49	22		15.0		
10	16.4	+44	40		15.2		
10	16.9	+45	49	3198	10.7	+ 649	$m_H = 11.7$ Sc
10	17.6	+48	14		15.6		compact
10	18.9	+48	17		15.4		
10	19.7	+46	30		14.8		
10	19.7	+48	53		15.5		
10	21.0	+45	06		15.4		
10	21.5	+47	05		15.5		
10	21.6	+48	14		15.7		
10	21.7	+47	15		15.6		
10	21.7	+48	42		15.6		
10	21.8	+46	43		15.7		compact
10	22.4	+47	45		15.6		compact
10	23.3	+45	50		15.1		double system
10	23.8	+47	20		15.6		
10	23.9	+47	47		15.7		compact
10	24.0	+46	19		15.5		
10	24.8	+46	16		15.4		
10	25.6	+49	20		15.3		
10	26.5	+50	02		15.1		
10	26.8	+47	33		15.7		
10	26.9	+48	37		15.2		
10	27.1	+47	32		15.7		
10	27.2	+47	25		15.3		
10	28.8	+46	55		14.7		
10	30.4	+49	35		15.6		double system
10	31.2	+44	46		15.6		
10	31.7	+44	53		15.3		
10	31.8	+47	14		15.6		
10	31.9	+45	32		14.8		
10	32.1	+45	00		15.3		compact
10	32.1	+46	49		14.1		
10	32.2	+44	52		15.5		
10	32.2	+45	21		14.2		
10	32.7	+44	35		15.4		
10	33.3	+49	38		15.7		very compact
10	34.2	+50	22	3298	15.0		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956	Holmberg 1958	
3198	-	-	-	-	-	Sc	10.82 Sc-





FIELD No. 241

$10^{\text{h}}52^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 709

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	i	"	
14659	10	37	09.2	+	47	06 07	7.30
14748	10	40	56.3	+	50	03 47	7.17
14783	10	42	24.5	+	45	49 46	6.87
15079	10	56	08.9	+	45	27 58	7.00
15246	11	02	53.4	+	50	26 34	7.07
15340	11	06	51.6	+	44	46 12	3.15

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1032.6 + 5015	medium compact	87	1.7	VD	22
1034.2 + 4510	compact	202	3.3	VD	25
1034.8 + 4800	medium compact	96	2.0	ED	23
1035.3 + 5013	medium compact	108	5.5	Near	21
1041.5 + 4647	compact	210	2.1	ED	24
1041.7 + 4731	medium compact	116	2.2	D	46
1042.6 + 4600	open	157	7.9	MD	45
1043.3 + 4944	medium compact	140	2.5	ED	20
1043.4 + 4848	medium compact	109	1.5	ED	44
1045.4 + 4737	medium compact	223	6.9	D	43
1046.7 + 4430	medium compact	159	3.7	VD	2
1046.8 + 4436	compact	98	0.7	ED	1
1049.0 + 4941	open	120	2.0	ED	18
1049.4 + 5004	compact	55	0.8	ED	19
1049.6 + 4723	compact	100	1.8	ED	42
1049.9 + 4923	medium compact	100	1.4	ED	17
1050.6 + 4530	compact	84	1.3	ED	41
1052.3 + 4945	medium compact	114	3.0	ED	16
1052.5 + 4741	medium compact	73	2.9	VD	39
1052.9 + 4834	compact	68	1.5	ED	40
1054.0 + 4612	open	73	2.9	D	38
1054.1 + 4900	medium compact	99	1.7	ED	37
1055.3 + 5010	medium compact	80	0.8	ED	15
1055.6 + 4432	open	126	5.6	MD	3
1056.6 + 5010	open	95	1.5	ED	14
1056.8 + 4753	compact	65	0.7	ED	36
1058.6 + 4611	open	140	11.2	Near	31
1059.0 + 4614	medium compact	160	2.4	VD	35
1100.0 + 5018	medium compact	73	1.4	VD	12
1100.4 + 4423	compact	106	1.6	ED	4
1101.0 + 4858	medium compact	113	3.8	D	32
1101.3 + 4459	compact	53	0.5	ED	30
1101.8 + 4741	compact	131	1.7	ED	33
1102.0 + 5004	compact	76	1.1	ED	11
1102.2 + 4710	medium compact	76	2.9	D	34
1103.5 + 4515	medium compact	142	4.5	D	29
1103.5 + 5029	open	176	6.5	MD	9
1103.7 + 4932	medium compact	101	1.3	ED	10
1104.5 + 4638	medium compact	121	2.3	MD	28
1105.3 + 4907	compact	53	0.6	ED	27
1106.2 + 4617	medium compact	140	1.4	ED	26
1106.7 + 4414	medium compact	332	9.2	MD	5
1107.4 + 4540	medium compact	123	1.5	ED	7
1111.0 + 5037	medium compact	82	2.8	D	13
1111.4 + 4934	medium compact	205	2.2	ED	6
1117.0 + 4653	open	210	12.8	Near	8

Average number of galaxies per cluster = 121.1

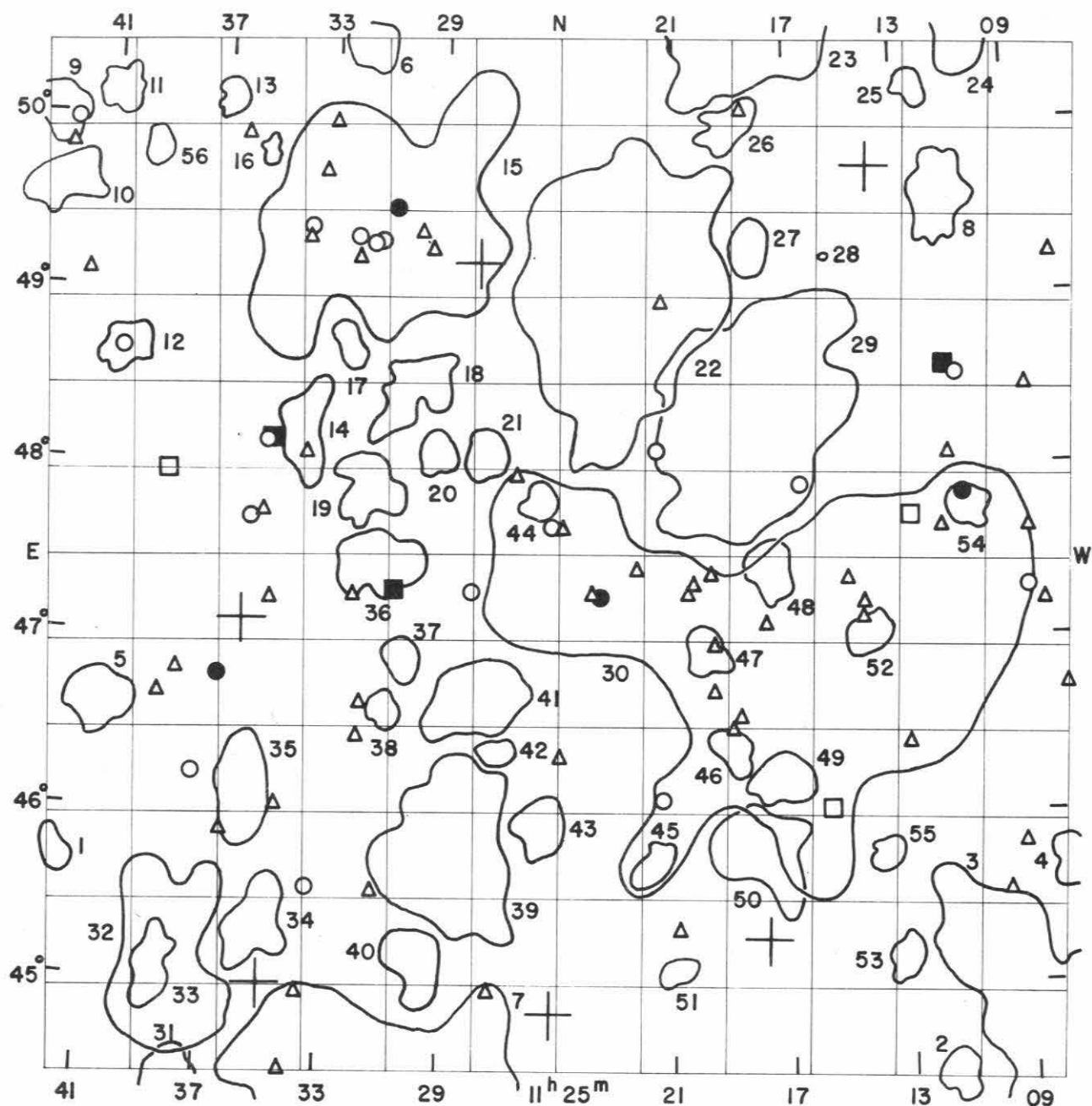
## GALAXIES

Position	NGC	$m_p$	$V_s$	Remarks
$\alpha$ 1950 $\delta$	IC*		km/sec	
h m o t				
10 34.2 + 50 22	3298	15.0		
10 35.2 + 45 06		14.9		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	t				
10	35.7	+44	47	3320	15.0		
10	36.5	+48	12		14.4		
10	36.6	+47	39		13.1	$m_H \approx 12.9$	S
10	36.8	+48	11		14.5		
10	38.7	+47	05		15.6		
10	39.3	+48	01		15.1		
10	42.2	+50	08		15.5		
10	43.1	+46	11		15.4		
10	43.1	+49	48		15.1		
10	44.4	+47	41		15.4		
10	45.3	+50	17		14.9		
10	45.4	+45	28		15.6		
10	45.9	+50	18		14.9		
10	46.0	+46	59		15.0		
10	46.0	+48	18		15.5		
10	46.7	+48	11		15.1		
10	47.6	+48	57		15.1		
10	47.8	+47	07		15.0		
10	47.8	+50	20		15.5		
10	48.4	+44	50		13.2		
10	49.3	+49	57		15.4		
10	49.5	+48	46		15.7		
10	49.6	+46	10		15.4		
10	49.8	+49	52		14.7		
10	50.9	+46	29		15.3		
10	51.0	+49	52		14.8		
10	51.0	+49	55		13.9		
10	51.1	+46	17		14.9		
10	51.3	+45	12		15.7		
10	51.3	+49	18		15.4		
10	51.6	+49	28		15.6		
10	51.7	+47	44		15.0		
10	51.8	+48	07		15.4		
10	51.9	+46	49		14.9		
10	52.0	+49	59		14.0		
10	52.1	+49	52		15.3		
10	52.3	+48	59		15.7		
10	52.7	+47	51		15.6		
10	53.2	+44	40		15.7	compact	
10	53.2	+47	40		15.5		
10	53.2	+50	12		15.0		
10	53.3	+47	09		15.7		
10	53.4	+47	08		15.7		
10	54.0	+44	35		15.6		
10	54.0	+50	24		15.7	compact	
10	55.2	+50	29		15.6		
10	55.7	+46	05		15.7		
10	55.7	+46	32		15.1		
10	56.6	+46	23	3478	13.7	$m_H \approx 13.2$	
10	56.6	+50	15		15.5	compact	
10	56.9	+50	17		14.8		
10	57.0	+50	19		14.4		
10	57.1	+46	20		15.1		
10	57.3	+46	00		14.4		
10	57.3	+46	11		14.5		
10	58.1	+45	10		15.2		
10	58.7	+45	55		14.1		
10	59.0	+44	43		14.7	double system	
10	59.1	+45	30		13.4		



Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	i				
10	59.3	+46	09		14.5		
10	59.4	+44	33		15.2		compact
10	59.4	+50	21		15.5		
11	00.2	+50	29		14.5		
11	00.8	+45	27		14.8		double system
11	01.1	+50	05		14.4		very faint companion
11	01.2	+45	32		14.8		
11	01.3	+50	17		15.2		
11	01.5	+46	23		15.5		
11	01.6	+45	24		15.3		
11	01.8	+45	24		13.0		
11	01.8	+46	15		14.7		
11	02.2	+45	00		14.6		
11	03.2	+48	32		15.7		diffuse
11	03.5	+45	47		15.6		
11	03.6	+48	55		15.1		
11	03.8	+46	18		15.6		
11	03.9	+46	14		14.6		
11	03.9	+48	07		15.6		double nebula
11	04.2	+46	06		15.3		
11	04.4	+46	39		14.8		two faint jets
11	05.1	+47	07		15.2		
11	05.2	+46	15		15.2		
11	05.6	+45	24		14.0		
11	05.6	+47	36		15.5		
11	06.8	+47	05		14.3		
11	07.1	+46	22		15.6		very diffuse
11	07.2	+45	43		15.7		
11	07.3	+49	14		15.5		
11	07.4	+46	43		15.7		
11	08.0	+47	14		15.4		
11	08.4	+48	28		15.4		
11	08.5	+47	39		15.3		
11	08.6	+47	19		14.3		
11	09.0	+45	50		15.2		



FIELD No. 242

$11^{\text{h}}25^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 700

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
15506	11	13	53.3	+	49	44 58	5.97
15582	11	17	46.6	+	45	16 21	6.66
15726	11	25	13.4	+	44	50 29	6.86
15780	11	27	45.7	+	49	12 41	7.07
15939	11	34	56.2	+	44	59 36	6.58
15970	11	35	52.8.	+	47	06 42	6.25

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1106.7 + 4414	medium compact	332	9.2	MD	3
1107.4 + 4540	medium compact	123	1.5	ED	4
1110.7 + 4746	compact	84	1.2	VD	54
1111.0 + 5037	medium compact	82	2.8	D	24
1111.4 + 4934	medium compact	205	2.2	ED	8
1111.6 + 4429	medium compact	68	1.4	ED	2
1112.3 + 5013	medium compact	72	1.0	ED	25
1113.3 + 4509	medium compact	91	1.2	ED	53
1113.7 + 4545	compact	55	0.9	ED	55
1114.2 + 4702	compact	117	1.3	ED	52
1115.5 + 4914	compact	32	0.2	ED	28
1117.0 + 4653	open	210	12.8	Near	30
1117.2 + 4612	compact	156	1.8	ED	49
1117.6 + 5033	medium compact	203	4.8	MD	23
1117.7 + 4725	medium compact	71	1.7	VD	48
1118.0 + 4547	medium compact	108	3.2	D	50
1118.2 + 4916	medium compact	57	1.4	VD	27
1118.4 + 4818	compact	483	6.8	D	29
1119.0 + 4621	compact	129	1.3	ED	46
1119.0 + 4959	medium compact	62	1.6	D	26
1119.9 + 4656	compact	83	1.3	ED	47
1120.8 + 4505	medium compact	64	1.0	ED	51
1121.7 + 4543	compact	120	1.3	ED	45
1122.8 + 4900	medium compact	365	7.8	MD	22
1125.6 + 4556	compact	117	1.7	ED	43
1125.6 + 4749	compact	71	1.1	ED	44
1127.1 + 4621	medium compact	59	1.0	ED	42
1127.5 + 4804	compact	80	1.5	VD	21
1127.8 + 4640	open	77	2.9	MD	41
1128.6 + 4546	open	140	4.8	D	39
1129.2 + 4805	medium compact	56	1.3	VD	20
1129.8 + 4506	compact	94	2.0	D	40
1130.1 + 4826	medium compact	100	2.2	D	18
1130.3 + 4654	compact	67	1.1	ED	37
1130.9 + 4635	medium compact	56	1.0	ED	38
1131.1 + 4726	medium compact	71	2.2	D	36
1131.2 + 4923	compact	257	7.9	Near	15
1131.6 + 4421	open	113	7.3	Near	7
1131.6 + 4753	medium compact	110	2.0	VD	19
1131.7 + 5028	compact	106	1.6	ED	6
1132.4 + 4842	compact	76	1.1	ED	17
1133.9 + 4812	compact	187	2.0	ED	14
1135.1 + 4518	medium compact	124	2.1	VD	34
1135.5 + 4948	compact	60	0.8	ED	16
1135.6 + 4606	compact	125	2.3	ED	35
1136.9 + 5007	compact	77	1.1	VD	13
1137.8 + 4425	medium compact	92	1.8	VD	31
1137.9 + 4505	medium compact	120	4.6	MD	32
1138.5 + 4501	compact	102	1.7	VD	33
1139.5 + 4948	compact	58	1.0	ED	56
1140.4 + 4839	compact	120	1.6	ED	12
1140.7 + 4636	compact	132	2.0	VD	5
1141.0 + 5009	compact	70	1.4	ED	11
1141.9 + 4543	medium compact	70	1.2	ED	1
1142.9 + 4936	medium compact	122	2.0	ED	10
1143.1 + 5000	medium compact	102	1.7	VD	9

Average number of galaxies per cluster = 117.6

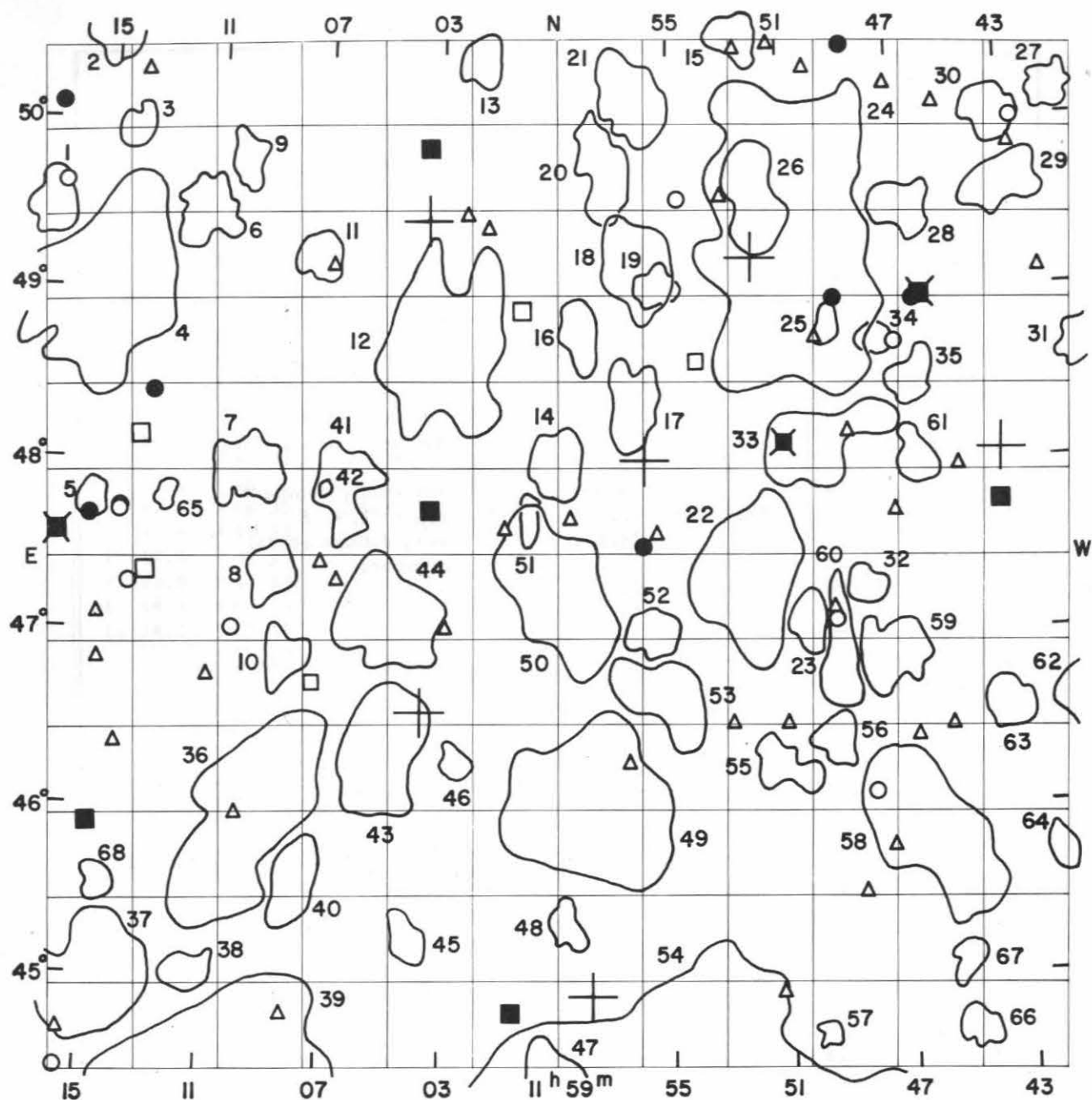
## GALAXIES

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
11	07.3	+49 14		15.5		
11	07.4	+46 43		15.7		
11	08.0	+47 14		15.4		
11	08.4	+48 28		15.4		
11	08.5	+47 39		15.3		
11	08.6	+47 19		14.3		
11	09.0	+45 50		15.2		
11	09.6	+45 33		15.3		
11	10.8	+47 51		13.6		
11	10.9	+48 33	3577	14.7		
11	11.2	+48 05		15.6		
11	11.3	+48 36	3583	11.6		$m_H = 12.2$ S
11	11.6	+47 39		15.4		
11	12.6	+47 43	3595	13.0		
11	12.8	+46 25		15.3		
11	14.3	+47 14		15.2		
11	14.4	+47 08		15.4		extremely compact
11	14.8	+47 22		15.2		very compact
11	15.5	+46 02	3614	12.7		$m_H = 12.9$ S
11	16.4	+47 55		14.7		
11	17.8	+47 06		15.7		very compact
11	18.5	+50 05		15.6		
11	18.6	+46 35		15.7		
11	18.9	+46 30		15.1		
11	19.5	+46 59		15.7		
11	19.6	+46 43		15.5		compact
11	19.7	+47 23		15.7		
11	20.2	+47 20		15.6		
11	20.4	+47 17		15.7		
11	20.8	+45 20		15.6		
11	21.3	+46 06		14.8		
11	21.3	+48 58		15.7		
11	21.5	+48 08	687*	15.0		compact
11	22.2	+47 25		15.6		
11	23.5	+47 15	3677	13.5		
11	23.8	+47 17		15.5		
11	24.9	+46 20		15.6		compact
11	24.9	+47 39		15.3		
11	25.2	+47 40		14.9		
11	26.3	+47 58		15.5		double system
11	27.3	+44 58		15.7		diffuse
11	27.9	+47 18		14.9		
11	29.4	+49 17		15.4		double system, faint bridge + jets
11	29.9	+49 23		15.7		very compact
11	30.6	+47 18	3726	11.2	+ 948	$m_H = 11.7$ S
11	30.8	+49 31		13.9		
11	31.2	+45 33		15.7		
11	31.2	+49 20	708*	14.2		
11	31.5	+49 19	709*	15.0		compact
11	31.7	+46 39		15.7		
11	31.8	+46 27		15.6		
11	32.0	+47 16		15.1		
11	32.0	+49 14	711*	15.2		compact
11	32.1	+49 21	712*	14.8		
11	33.0	+50 01		15.5		
11	33.3	+49 43		15.7		

Position 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
11	33.4	+45	34	3741	14.2		
11	33.7	+44	57		15.7		
11	33.8	+48	06		15.6		
11	33.8	+49	24		14.9		
11	33.9	+49	20		15.5		very compact
11	34.2	+44	29		15.6		
11	34.6	+46	03		15.4		diffuse
11	35.0	+47	14		15.7		
11	35.0	+48	10	3769	11.7		$m_H = 12.5$ SBc
11	35.1	+48	09		14.7		
11	35.3	+47	45		15.1		double system
11	35.7	+47	43		14.9		double system, bridge + jets
11	36.2	+49	56		15.7		
11	36.3	+45	54		15.3		extremely compact
11	36.7	+46	47	3782	13.1		$m_H = 12.9$ S
11	37.4	+46	13		14.6		very diffuse spiral
11	38.1	+46	49		15.2		compact
11	38.6	+47	58	3811	13.0		
11	38.7	+46	40		15.4		
11	40.4	+48	40		15.0		
11	41.8	+49	07		15.5		extremely diffuse spiral
11	42.5	+50	00		14.8		
11	42.6	+49	51	731*	15.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3583	11.7	-	-	-	-	-	-	-
3614	12.1	-	-	-	-	-	-	-
3677	12.9	-	-	-	-	-	-	-
3726	10.55	Sc	-	-	11.8	Sc	10.84	Sc-
3741	13.4	-	-	-	-	-	-	-
3769	12.0	-	-	-	-	-	-	-
3782	12.3	-	-	-	-	-	-	-



FIELD No. 243

$11^{\text{h}}59^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 1338

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
16137	11	43	25.0	+	48	03 24	3.85
16285	11	52	04.6	+	49	12 45	7.42
16377	11	55	57.9	+	48	02 36	7.05
16416	11	57	50.4	+	44	54 30	7.47
16537	12	03	34.5	+	49	26 12	7.77
16545	12	03	47.3	+	46	33 46	7.55

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1140.4 + 4839	compact	120	1.6	ED	31
1140.7 + 4636	compact	132	2.0	VD	62
1141.0 + 5009	compact	70	1.4	ED	27
1141.9 + 4543	medium compact	70	1.2	ED	64
1142.9 + 4936	medium compact	122	2.0	ED	29
1143.1 + 5000	medium compact	102	1.7	VD	30
1143.5 + 4634	open	95	1.6	VD	63
1144.9 + 4442	medium compact	114	1.3	ED	66
1145.1 + 4504	medium compact	83	1.2	ED	67
1146.3 + 4551	open	216	4.3	D	58
1146.3 + 4800	medium compact	96	1.4	ED	61
1146.6 + 4829	compact	146	1.5	ED	35
1146.6 + 4929	medium compact	122	1.8	ED	28
1147.4 + 4653	open	60	2.1	VD	59
1147.8 + 4843	compact	58	0.9	ED	34
1148.2 + 4717	compact	95	1.2	ED	32
1149.1 + 4650	open	105	2.1	MD	60
1149.4 + 4623	medium compact	98	1.5	ED	56
1149.4 + 4848	medium compact	55	0.9	VD	25
1149.8 + 4806	open	117	3.0	MD	33
1149.9 + 4441	medium compact	72	0.7	VD	57
1150.2 + 4705	medium compact	110	1.5	ED	23
1150.6 + 4920	open	171	7.7	MD	24
1151.1 + 4613	medium compact	128	1.6	ED	55
1151.9 + 4933	medium compact	91	2.5	VD	26
1152.3 + 4720	open	111	4.1	VD	22
1152.6 + 5030	medium compact	93	1.5	ED	15
1155.2 + 4639	open	65	2.7	VD	53
1155.6 + 4901	compact	98	1.3	ED	19
1155.7 + 4701	medium compact	99	1.5	ED	52
1156.1 + 4909	medium compact	115	2.7	D	18
1156.4 + 4820	compact	168	2.1	ED	17
1156.4 + 5009	compact	244	2.3	ED	21
1157.2 + 4332	open	463	15.5	Near	54
1157.3 + 4943	medium compact	148	2.2	VD	20
1157.8 + 4600	medium compact	98	5.2	MD	49
1158.1 + 4845	medium compact	156	1.5	ED	16
1158.7 + 4519	medium compact	91	1.2	ED	48
1159.0 + 4424	medium compact	192	2.2	ED	47
1159.0 + 4716	medium compact	110	4.0	D	50
1159.0 + 4800	compact	194	1.9	ED	14
1200.0 + 4741	medium compact	62	1.0	ED	51
1201.7 + 5022	medium compact	104	1.5	VD	13
1202.5 + 4615	medium compact	59	1.0	ED	46
1203.0 + 4841	medium compact	110	4.6	MD	12
1204.0 + 4514	compact	99	1.3	ED	45
1204.8 + 4707	open	102	3.4	D	44
1205.0 + 4619	open	70	3.3	VD	43
1206.4 + 4750	open	61	2.3	VD	41
1207.1 + 4751	compact	54	0.4	ED	42
1207.5 + 4913	open	87	1.5	ED	11
1207.8 + 4534	medium compact	149	2.0	ED	40
1208.4 + 4651	medium compact	102	1.6	ED	10
1208.9 + 4721	compact	144	1.7	ED	8
1209.4 + 4556	open	105	5.0	MD	36
1209.7 + 4429	open	120	5.7	MD	39
1209.7 + 4758	open	208	2.1	ED	7

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1210.1 + 4945	medium compact	58	1.4	VD	9
1211.3 + 4501	medium compact	99	1.4	ED	38
1211.5 + 4927	medium compact	218	2.0	ED	6
1212.7 + 4747	medium compact	59	0.7	ED	65
1214.4 + 4955	compact	87	1.2	ED	3
1214.6 + 4531	medium compact	114	1.1	ED	68
1214.8 + 4456	open	96	4.0	MD	37
1215.1 + 5033	medium compact	94	2.1	ED	2
1215.3 + 4745	medium compact	87	1.1	ED	5
1215.3 + 4858	open	114	5.3	MD	4
1217.1 + 4929	compact	109	1.8	ED	1

Average number of galaxies per cluster = 115.6

### GALAXIES

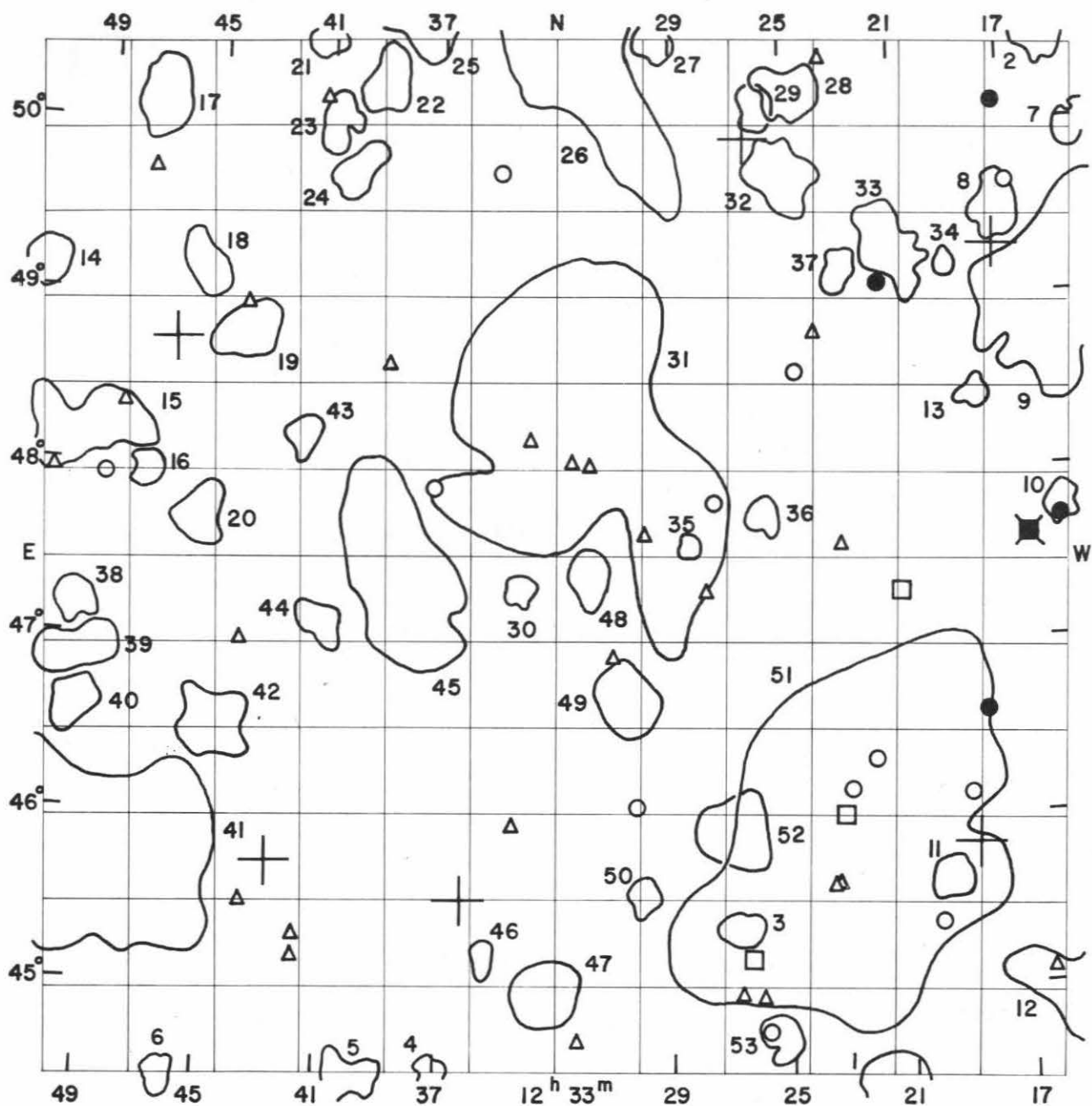
Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
11	41.8	+49 07		15.5		extremely diffuse spiral
11	42.5	+50 00		14.8		
11	42.6	+49 51	731*	15.6		
11	43.5	+47 46	3877	11.8		m <sub>H</sub> = 12.0 Sc
11	44.9	+47 58		15.7		
11	45.4	+46 28		15.5		
11	45.4	+50 05		15.2		
11	46.0	+48 59	3893	10.6	+ 955	m <sub>H</sub> = 11.0 Sc
11	46.3	+48 56	3896	14.0		
11	46.6	+46 24		15.6		
11	47.0	+48 42	3906	14.1		
11	47.0	+50 12		15.6		diffuse
11	47.2	+47 43		15.7		
11	47.6	+45 45		15.6		
11	48.2	+46 05		14.6		
11	48.5	+45 30		15.7		compact
11	48.6	+50 27	3922	13.8		
11	48.8	+48 11		15.7		
11	49.1	+48 57	3928	13.1		
11	49.3	+47 05		15.0		double system
11	49.4	+47 09		15.5		compact
11	49.9	+48 44	3932	15.1		
11	50.0	+50 18	3924	15.7		diffuse spiral
11	51.1	+46 29		15.2		
11	51.1	+48 08	3949	10.9	+ 681	m <sub>H</sub> = 11.6 Sc
11	51.3	+50 29		15.6		
11	51.4	+44 55		15.5		
11	52.6	+50 26		15.5		
11	53.0	+46 30		15.6		double system, bridge
11	53.1	+49 34		15.5		
11	54.1	+48 36	3985	13.0		m <sub>H</sub> = 12.9 S
11	54.7	+49 33		14.2		
11	55.5	+47 37	4001	15.6		
11	56.0	+47 32	4010	13.1		
11	56.6	+46 16		15.7		
11	58.6	+47 42		15.7		
12	00.3	+48 55	4047	12.8		m <sub>H</sub> = 12.8
12	00.6	+44 48	4051	11.5	+ 627	m <sub>H</sub> = 11.7 Sb
12	00.9	+47 38		15.6		



Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
12	01.5	+49 23		15.6		
12	02.2	+49 28		15.4		
12	02.9	+47 03		15.5		
12	03.4	+47 45	4096	11.6		$m_H = 12.2$ Sc
12	03.6	+49 52	4100	11.7		$m_H = 11.9$ Sc
12	06.6	+47 20		15.2		
12	07.0	+49 10		15.4		
12	07.2	+47 26		15.4		
12	07.4	+46 43	4144	12.3		$m_H = 12.4$ S
12	08.3	+44 47		15.4		
12	09.9	+45 58		15.5		
12	10.3	+47 02		14.8		compact
12	11.0	+46 45		15.1		
12	13.3	+47 21	4217	12.4		$m_H = 11.9$ S
12	13.3	+48 23	4218	13.2		
12	13.7	+48 09	4220	12.4	+ 979	$m_H = 12.4$ Sc
12	13.9	+50 17		15.7		compact
12	14.0	+47 17	4226	14.4		
12	14.2	+46 21		15.7		
12	14.3	+47 42	4232	14.6		
12	14.3	+47 43	4231	14.5		
12	15.0	+45 53	4242	11.9		$m_H = 11.8$ S
12	15.0	+46 50		15.4		
12	15.0	+47 05		15.3		
12	15.4	+47 41	4248	13.9		
12	15.6	+44 40		15.3		
12	15.7	+44 27		14.2		double system, faint bridge
12	16.5	+47 35	4258	9.6	+ 420	$m_H = 10.2$ Sb
12	16.7	+49 38		14.3		
12	17.0	+50 05		13.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3877	11.6	-	-	-	-	-	-	-
3893	11.7	Sc	-	-	11.0	Sc	-	-
3949	11.3	Sc	-	-	11.3	Sc	-	-
3985	13.0	-	-	-	-	-	-	-
4010	12.4	-	-	-	-	-	-	-
4047	12.5	-	-	-	-	-	-	-
4051	10.6	Sbc	-	-	11.0	Sb	10.81	Sb+
4096	11.1	Sc	-	-	-	-	10.88	Sc+
4100	11.6	Sc	-	-	-	-	-	-
4144	11.5	-	-	-	-	-	-	-
4217	11.3	-	-	-	-	-	-	-
4220	11.9	-	-	-	12.2	Sa	-	-
4242	11.9	S	-	-	-	-	11.39	Sc+
4248	-	-	-	-	-	-	13.07	S
4258	9.3	Sb	9.39	Sb	9.0	Sb	8.90	Sb+



FIELD No. 244

$12^{\text{h}}33^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 1408

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
16814	12	17	21.3	+	49	15 41	5.56
16846	12	18	35.1	+	45	47 33	7.24
17008	12	26	15.1	+	49	54 42	7.12
17219	12	36	10.6	+	45	29 32	7.09
17342	12	42	47.1	+	45	42 48	Var.
17402	12	46	24.0	+	48	44 20	6.20

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1214.4 + 4955	compact	87	1.2	ED	7
1214.8 + 4456	open	96	4.0	MD	12
1215.1 + 5033	medium compact	94	2.1	ED	2
1215.3 + 4745	medium compact	87	1.1	ED	10
1215.3 + 4858	open	114	5.3	MD	9
1217.1 + 4929	compact	109	1.8	ED	8
1218.2 + 4824	medium compact	72	0.9	ED	13
1219.1 + 4910	compact	44	0.7	ED	34
1219.6 + 4536	compact	55	1.3	ED	11
1221.0 + 4915	medium compact	90	2.3	D	33
1221.9 + 4347	open	118	5.6	MD	1
1222.6 + 4548	medium compact	162	10.7	Near	51
1222.9 + 4908	compact	82	1.2	ED	37
1224.6 + 5011	medium compact	78	1.8	D	28
1225.0 + 4943	medium compact	98	2.2	D	32
1225.3 + 4442	compact	50	1.4	ED	53
1225.8 + 4743	compact	69	1.1	VD	36
1225.8 + 5006	compact	59	1.3	ED	29
1226.7 + 4519	compact	62	1.2	ED	3
1227.0 + 4555	medium compact	87	2.2	ED	52
1228.3 + 4734	compact	47	0.7	ED	35
1229.6 + 5029	compact	62	1.2	ED	27
1230.0 + 4530	medium compact	50	1.1	ED	50
1230.5 + 4639	compact	66	2.2	VD	49
1231.4 + 5044	medium compact	293	7.8	Near	26
1231.8 + 4810	open	175	9.0	Near	31
1231.9 + 4722	medium compact	80	1.5	ED	48
1233.4 + 4458	medium compact	108	2.2	VD	47
1234.1 + 4717	medium compact	57	1.0	ED	30
1235.4 + 4510	compact	62	0.9	ED	46
1237.0 + 4429	compact	105	1.1	ED	4
1238.0 + 5043	medium compact	122	3.1	VD	25
1238.3 + 4725	open	133	4.7	D	45
1239.1 + 5015	medium compact	88	1.6	ED	22
1239.8 + 4429	medium compact	95	1.6	ED	5
1240.1 + 4944	medium compact	75	1.5	ED	24
1240.9 + 5000	medium compact	88	1.3	VD	23
1241.0 + 4705	medium compact	61	1.3	ED	44
1241.3 + 5030	compact	54	1.1	ED	21
1241.8 + 4811	compact	61	1.1	ED	43
1243.9 + 4846	medium compact	106	1.8	VD	19
1244.6 + 4630	medium compact	88	2.3	VD	42
1245.3 + 4741	open	85	1.6	ED	20
1245.5 + 4909	compact	64	1.5	ED	18
1246.0 + 4427	open	56	1.1	ED	6
1247.2 + 4758	medium compact	68	1.0	ED	16
1247.2 + 5008	compact	215	2.1	ED	17
1249.0 + 4540	open	133	7.7	MD	41
1249.4 + 4636	compact	85	1.6	VD	40
1249.4 + 4654	compact	121	2.0	ED	39
1249.4 + 4812	medium compact	120	2.9	VD	15
1249.5 + 4712	compact	71	1.3	ED	38
1251.1 + 4910	compact	65	1.5	VD	14

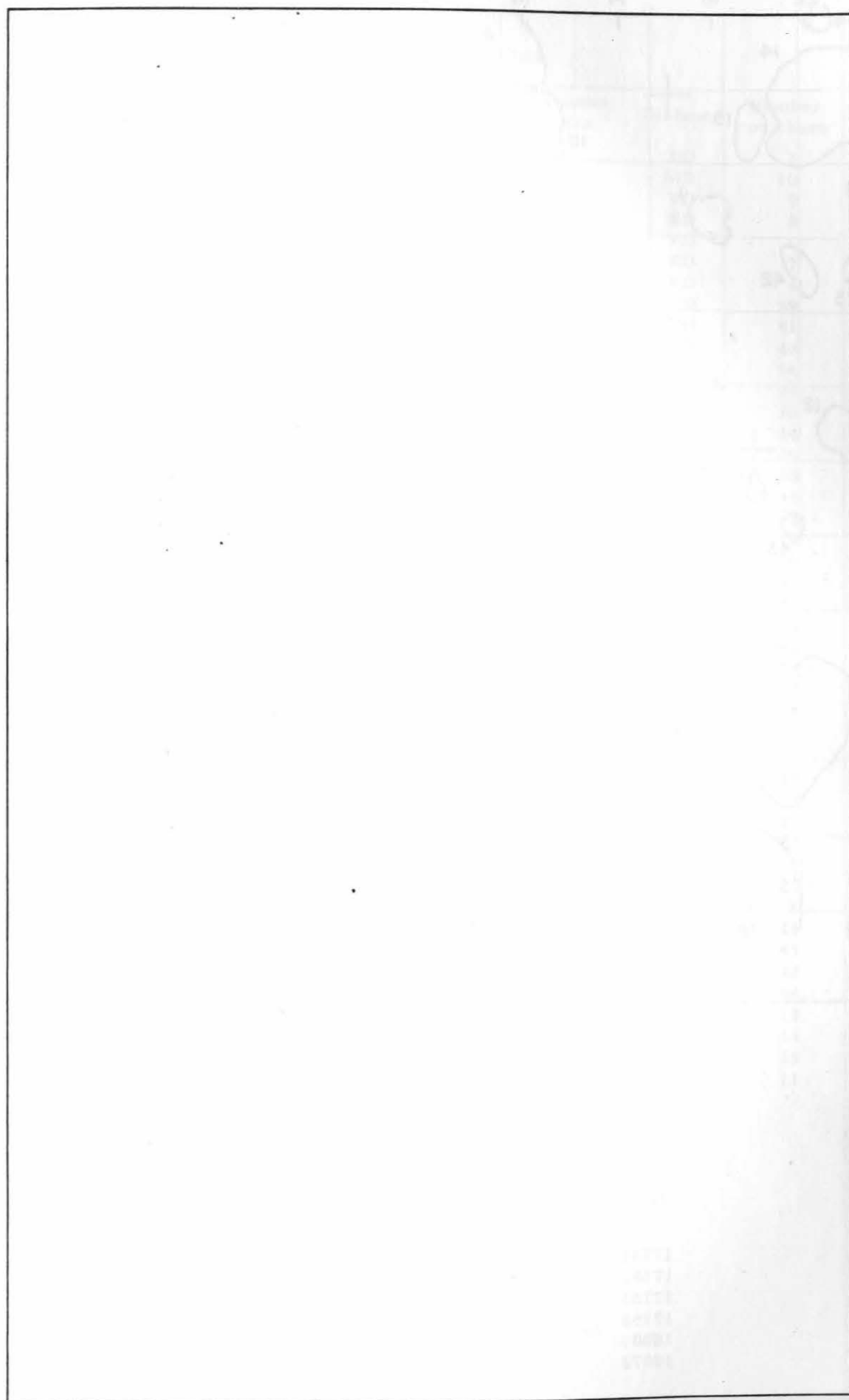
Average number of galaxies per cluster = 91.9

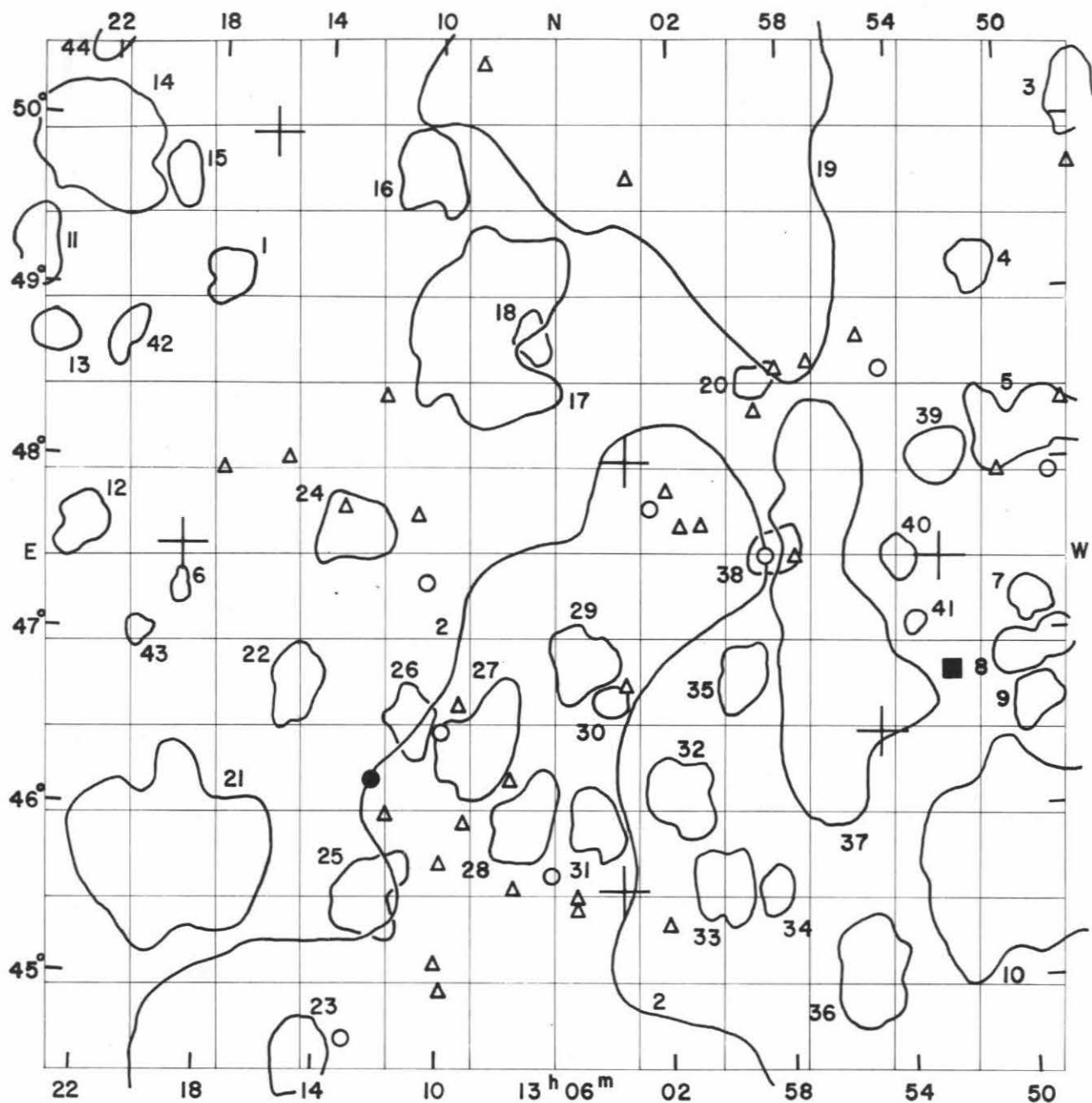
## GALAXIES

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	i				
12	15.4	+47	41	4248	13.9		
12	16.3	+45	04		15.4		compact
12	16.5	+47	35	4258	9.6	+ 420	$m_H = 10.2$ Sb
12	16.7	+49	38		14.3		
12	17.0	+50	05		13.7		
12	18.2	+46	35	4288	13.6		
12	18.8	+46	06		14.8		diffuse
12	20.0	+45	20		14.7		
12	21.0	+47	16	4346	12.3		$m_H = 12.4$ SBa
12	21.6	+49	03	4357	13.5		
12	22.0	+46	18		15.0		
12	22.8	+46	08	4392	14.6		
12	23.0	+47	33		15.1		
12	23.1	+45	58	4389	12.8		$m_H = 12.8$ S
12	23.3	+45	34		15.4		
12	23.4	+45	33		15.5		diffuse spiral
12	23.4	+50	22		14.9		
12	23.9	+48	46		15.3		compact with large plume
12	24.6	+48	33		14.7		
12	25.8	+44	43		14.8		double system, plume + streamers
12	26.0	+44	54		15.1		
12	26.4	+45	09	4460	12.5		$m_H = 12.5$ Sc
12	26.7	+44	55		15.6		
12	27.5	+47	48		14.9		diffuse
12	27.8	+47	17		15.6		compact
12	29.9	+47	37		15.5		compact
12	30.2	+46	03		14.6		
12	31.0	+46	54		15.7		
12	31.8	+48	00		15.7		
12	32.3	+44	40		15.2		
12	32.4	+48	01		15.3		compact
12	33.9	+48	10		15.6		
12	34.5	+45	56		15.2		
12	34.9	+49	43		15.0		
12	37.2	+47	54		14.9		
12	38.8	+48	21		15.6		
12	41.2	+50	08		15.6		
12	41.8	+45	10		15.7		
12	41.8	+45	17		15.4		disrupted spiral
12	43.6	+45	28		15.2		disrupted spiral
12	43.8	+46	59		15.5		
12	43.9	+48	56		15.7		
12	47.4	+49	43		15.3		
12	48.1	+48	20		15.7		compact
12	48.7	+47	56	4741	14.5		
12	50.5	+47	57		15.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4248	-	-	-	-	-	-	13.07	S
4258	9.3	Sb	9.39	Sb	9.0	Sb	8.90	Sb+





FIELD No. 245

13<sup>h</sup>06<sup>m</sup> + 47°30'

Survey Plate No. 1350

# GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	o	i	"	
17533	12	52	39.8	+	47	28 03	6.02
17582	12	54	51.0	+	46	26 51	6.22
17753	13	03	32.7	+	48	02 47	7.38
17758	13	03	37.5	+	45	32 08	5.72
18009	13	16	07.1	+	49	56 40	5.13
18072	13	18	58.4	+	47	31 53	7.08

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1247.2 + 5008	compact	215	2.1	ED	3
1249.0 + 4540	open	133	7.7	MD	10
1249.4 + 4636	compact	85	1.6	VD	9
1249.4 + 4654	compact	121	2.0	ED	8
1249.4 + 4812	medium compact	120	2.9	VD	5
1249.5 + 4712	compact	71	1.3	ED	7
1251.1 + 4910	compact	65	1.5	VD	4
1252.6 + 4803	medium compact	65	1.8	ED	39
1253.5 + 4704	compact	55	0.7	ED	41
1254.0 + 4728	medium compact	50	1.2	ED	40
1255.4 + 4501	compact	106	2.8	VD	36
1256.4 + 4701	open	121	7.0	MD	37
1258.3 + 4730	medium compact	69	1.6	ED	38
1258.6 + 4531	compact	65	1.2	ED	34
1259.0 + 4830	compact	90	1.1	ED	20
1259.5 + 4646	medium compact	82	1.8	ED	35
1300.2 + 4534	medium compact	88	2.1	ED	33
1301.7 + 4605	compact	125	2.2	ED	32
1301.9 + 5001	open	235	11.6	Near	19
1304.0 + 4639	compact	70	1.0	ED	30
1304.5 + 4555	compact	114	2.0	ED	31
1305.0 + 4652	compact	129	2.1	VD	29
1306.8 + 4845	compact	78	1.3	ED	18
1307.0 + 4555	medium compact	119	2.3	VD	28
1308.3 + 4456	medium compact	477	20.3	Near	2
1308.4 + 4849	medium compact	173	5.3	D	17
1308.6 + 4621	medium compact	182	2.9	D	27
1310.4 + 4943	medium compact	159	2.3	ED	16
1310.8 + 4631	compact	135	1.8	VD	26
1312.2 + 4529	compact	144	2.4	ED	25
1312.9 + 4738	medium compact	64	2.2	ED	24
1314.4 + 4432	medium compact	123	2.1	VD	23
1314.9 + 4644	compact	157	2.0	ED	22
1317.6 + 4905	open	80	1.6	ED	1
1318.8 + 4543	medium compact	152	5.8	VD	21
1318.9 + 4715	compact	55	0.7	ED	6
1319.4 + 4940	compact	80	1.5	ED	15
1320.4 + 4700	compact	55	0.8	ED	43
1321.3 + 4843	medium compact	64	1.3	ED	42
1322.2 + 5028	medium compact	72	1.2	ED	44
1322.4 + 4737	compact	97	1.7	ED	12
1322.5 + 4951	medium compact	144	4.1	VD	14
1323.8 + 4844	compact	62	1.4	ED	13
1324.6 + 4912	compact	132	2.1	ED	11

Average number of galaxies per cluster = 115.4

## GALAXIES

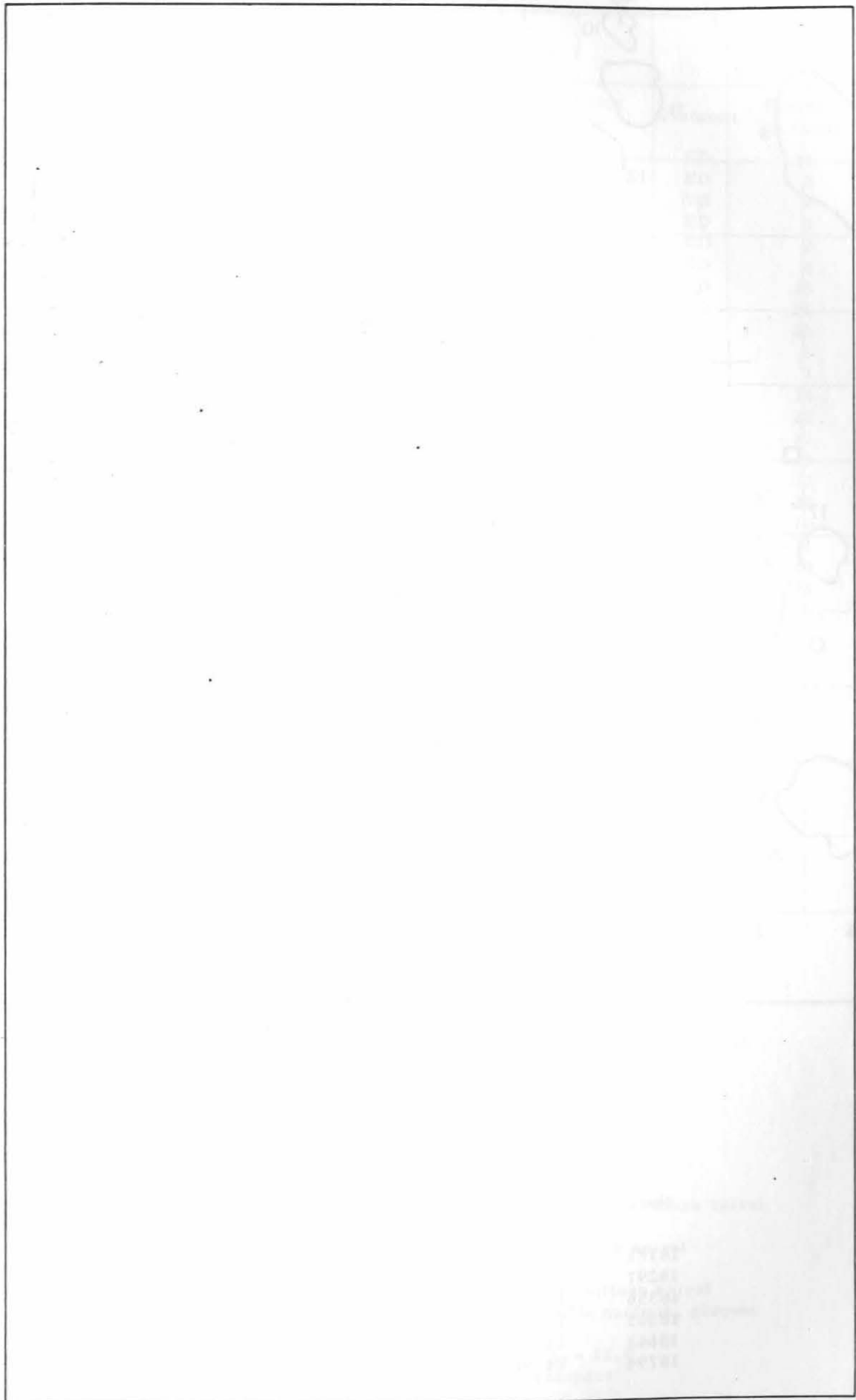
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
12	47.4	+49 43		15.3		
12	48.1	+48 20		15.7		compact
12	48.7	+47 56	4741	14.5		
12	50.5	+47 57		15.7		

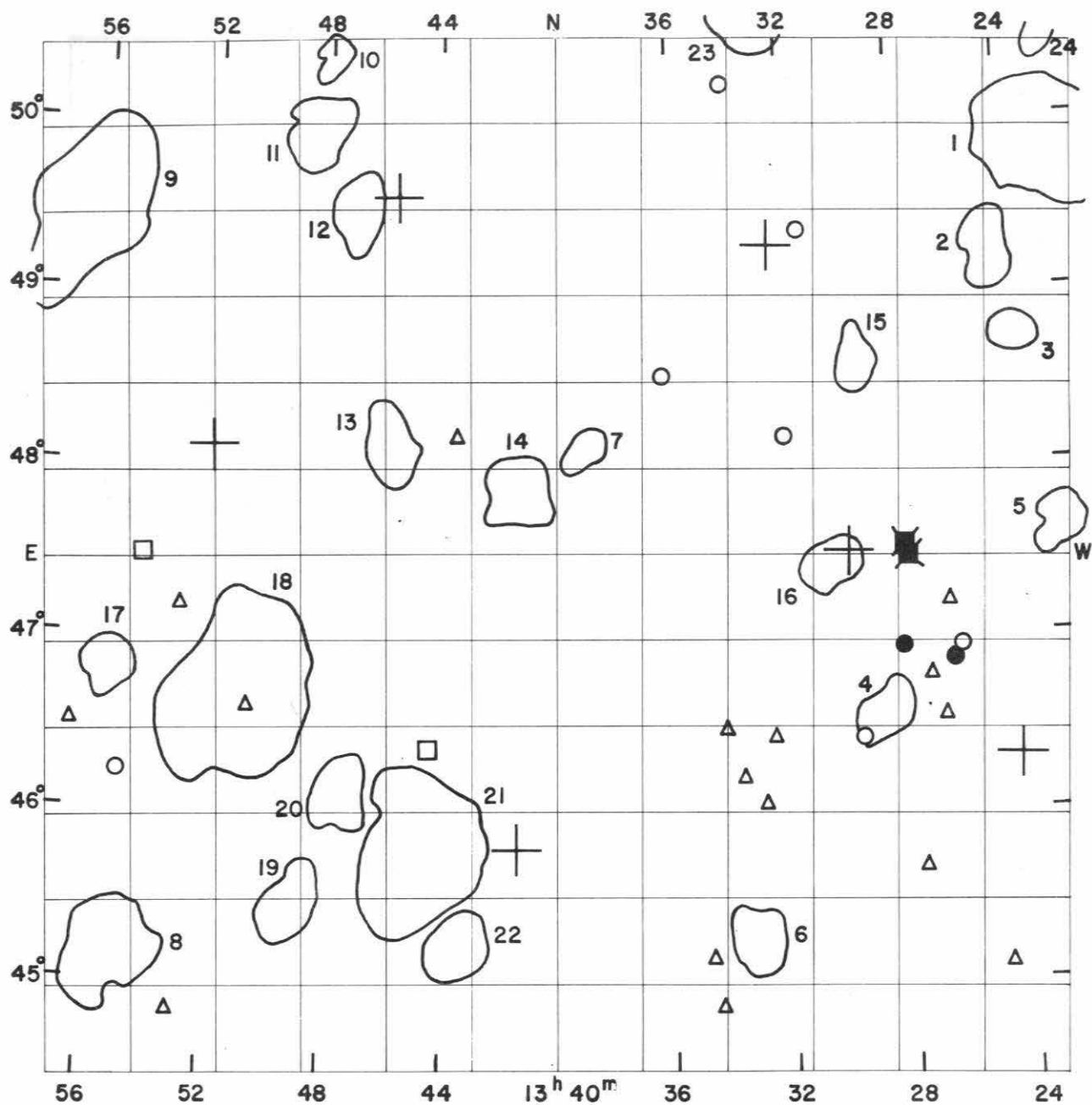
Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
12	52.3	+46	48	4800	12.0	+746	$m_H = 12.0$ Sb
12	54.6	+48	34	4837	14.4		
12	55.3	+48	45		15.6		
12	57.1	+48	37		15.7		
12	57.7	+47	28	4901	15.5		
12	58.2	+48	34		15.7		
12	58.7	+47	30	4917	15.0		
12	59.0	+48	19		15.1		double system, connected
13	01.0	+47	40		15.2		very compact
13	01.6	+47	39		15.3		
13	02.1	+45	20		15.6		
13	02.1	+47	52		15.4		
13	02.7	+47	46		15.0		
13	03.5	+46	44		15.7		
13	03.5	+49	41		15.5		double nucleus
13	05.2	+45	29		15.6		
13	05.3	+45	25		15.7		
13	06.1	+45	38		14.6		
13	07.4	+45	32		15.6		
13	07.5	+46	11		15.3		
13	08.6	+50	21	5009	15.6		
13	09.0	+45	56		15.4		
13	09.3	+46	37		15.4		
13	09.9	+44	57		15.5		
13	09.9	+45	42		15.6		compact
13	09.9	+46	28	5021	14.3		
13	10.0	+45	07		15.5		compact
13	10.4	+47	20	5029	14.5		
13	10.8	+47	44		15.5		
13	11.8	+45	59		15.6		
13	11.9	+48	25		15.7		
13	12.2	+46	11		14.0		
13	13.0	+44	40		14.9		double system, two bridges
13	13.3	+47	45		15.6		
13	15.3	+48	03		15.7		
13	17.6	+47	59		15.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
4800	-	-	12.2 Sb	-







FIELD No. 246

$13^{\text{h}}40^{\text{m}}$   $+47^{\circ}30'$

Survey Plate No. 1593

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
18171	13	24	08.0	+	46	17 15	5.89
18297	13	29	50.3	+	47	29 28	6.90
18356	13	32	24.8	+	49	16 16	4.63
18563	13	41	21.8	+	45	46 16	6.68
18643	13	45	34.3	+	49	33 44	1.91
18794	13	51	57.6	+	48	07 04	7.50

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1322.2 + 5028	medium compact	72	1.2	ED	24
1322.4 + 4737	compact	97	1.7	ED	5
1322.5 + 4951	medium compact	144	4.1	VD	1
1323.8 + 4844	compact	62	1.4	ED	3
1324.6 + 4912	compact	132	2.1	ED	2
1328.7 + 4633	medium compact	97	1.7	ED	4
1329.4 + 4834	medium compact	76	1.5	VD	15
1330.5 + 4725	compact	103	1.9	VD	16
1332.8 + 5043	medium compact	110	3.1	MD	23
1333.2 + 4515	medium compact	95	1.9	ED	6
1339.0 + 4806	compact	69	1.3	ED	7
1341.3 + 4752	medium compact	136	2.2	VD	14
1343.4 + 4513	compact	113	2.1	VD	22
1344.6 + 4545	medium compact	135	4.5	MD	21
1345.7 + 4808	compact	96	2.1	VD	13
1347.0 + 4928	compact	99	2.0	VD	12
1347.4 + 4605	medium compact	80	2.0	VD	20
1348.0 + 5024	compact	75	1.2	ED	10
1348.6 + 4957	medium compact	131	2.2	ED	11
1349.0 + 4525	medium compact	93	2.1	ED	19
1350.9 + 4638	medium compact	162	5.4	MD	18
1355.0 + 4510	medium compact	151	3.2	D	8
1355.3 + 4649	medium compact	103	1.7	ED	17
1356.7 + 4930	medium compact	233	4.4	MD	9

Average number of galaxies per cluster = 111.0

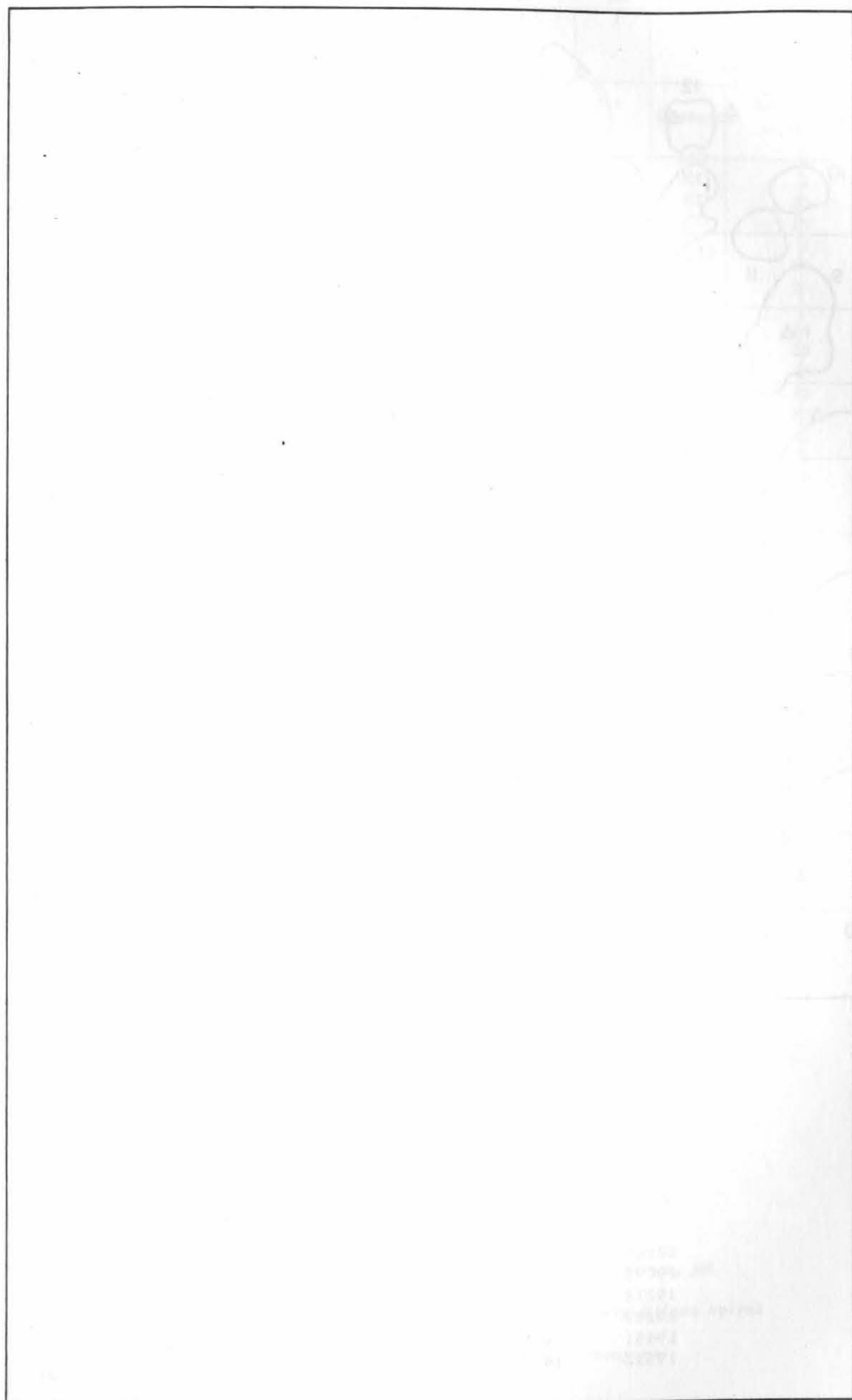
## GALAXIES

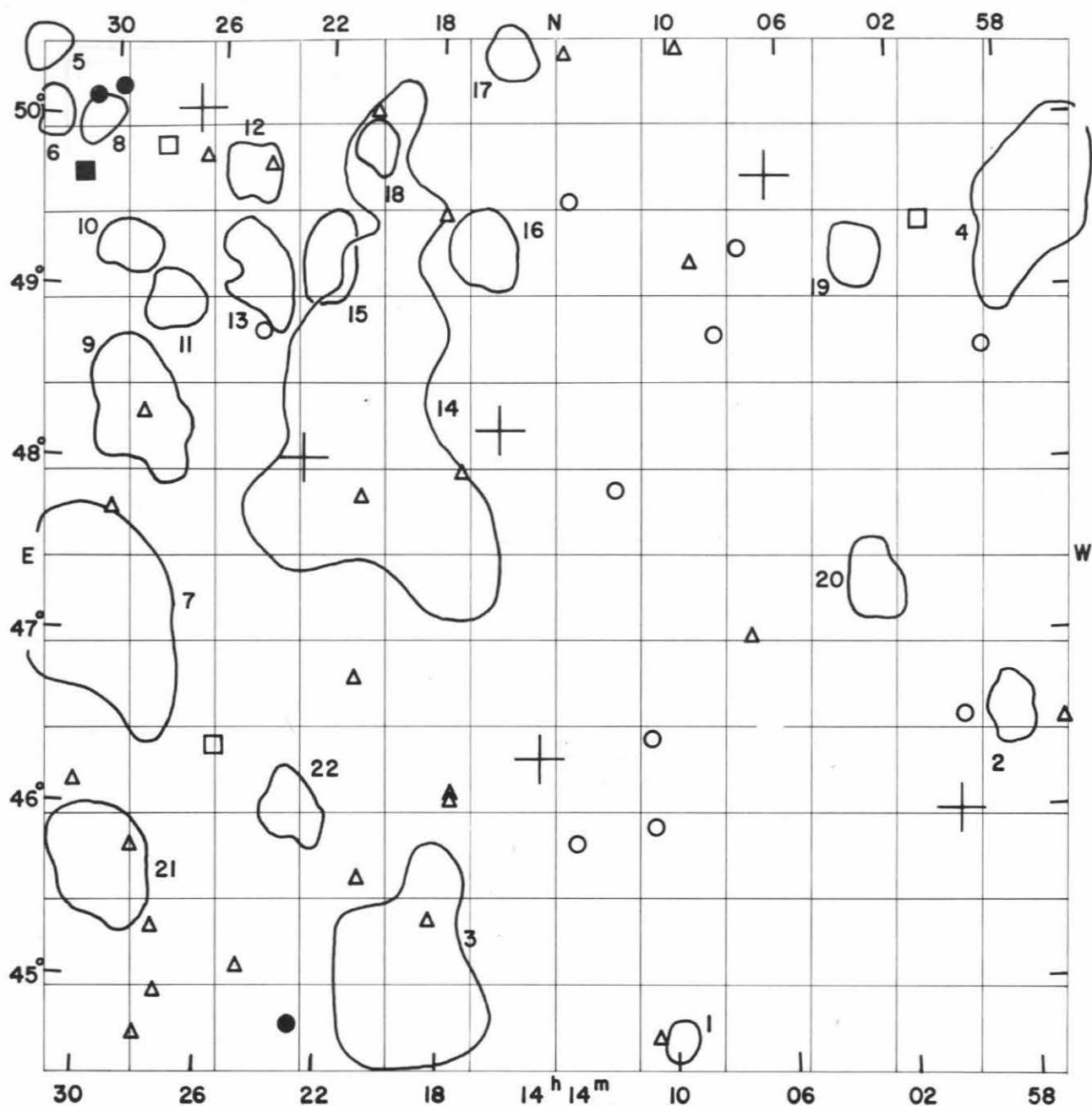
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
13	24.8	+45 05		15.6		very compact
13	26.0	+46 56	5169	14.7		
13	26.3	+46 51	5173	13.5	+ 2404	
13	26.5	+47 12	4263*	15.4		
13	26.7	+46 31		15.1		
13	27.1	+46 46		15.7		
13	27.6	+45 39		15.2		
13	27.8	+47 27	5194	8.8	+ 438	m <sub>H</sub> =10.1 Sc
13	27.9	+47 31	5195	10.6	+ 542	m <sub>H</sub> =11.1 I
13	28.1	+46 56	5198	13.2	+ 2522	m <sub>H</sub> =12.9 E
13	29.5	+46 25		15.0		
13	31.3	+49 21		14.9		
13	32.0	+48 10	5229	14.6		
13	32.5	+46 25		15.6		compact
13	33.0	+46 02		15.4		
13	33.7	+46 11		15.3		extremely diffuse spiral
13	34.0	+50 13	902*	14.7		
13	34.2	+46 28		15.2		disrupted spiral
13	34.5	+44 51		15.3		
13	34.8	+45 09		15.5		very diffuse spiral
13	36.2	+48 32	5256	14.1		double nucleus, plumes
13	43.5	+48 11		15.1		
13	44.4	+46 22	5301	13.0	+ 1702	m <sub>H</sub> = 13.0
13	50.6	+46 36		15.7		compact

Position				NGC IC*	$m_p$	$v_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "					
13 52.9		+ 47 12			15.6		extremely compact
13 53.0		+ 44 50			15.5		
13 54.3		+ 47 29		5377	12.5	+ 1830	$m_H = 12.8$ Sa
13 55.0		+ 46 13			14.3		
13 56.6		+ 46 30			15.7		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5173	-	-	-	-	13.8	E0	-	-
5194	-	-	8.89	Sc	8.6	Sc	8.88	Sc-
5195	-	-	10.71	Irr.	10.7	Ep	10.47	Ir. II
5198	-	-	-	-	13.0	E1	-	-
5301	-	-	-	-	-	Sc	-	-
5377	-	-	12.05	Sa	12.0	Sa	-	-





FIELD No. 247

$14^{\text{h}} 14^{\text{m}} + 47^{\circ} 30'$

Survey Plate No. 120

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s	° ' "	
18969	14	00	13.0	+ 45 59 41	6.46
19095	14	06	25.2	+ 49 41 37	5.44
19273	14	14	29.0	+ 46 19 02	4.26
19297	14	15	57.4	+ 48 13 57	6.25
19451	14	22	48.9	+ 48 03 22	7.35
19532	14	26	53.4	+ 50 04 04	5.61

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1356.7 + 4930	medium compact	233	4.4	MD	4
1358.3 + 4633	medium compact	93	1.8	ED	2
1402.8 + 4719	compact	145	2.1	ED	20
1403.1 + 4912	compact	111	1.8	ED	19
1409.6 + 4440	compact	54	1.1	ED	1
1415.5 + 5024	medium compact	76	1.6	ED	17
1416.4 + 4915	compact	117	2.2	ED	16
1418.8 + 4502	medium compact	131	5.5	MD	3
1420.2 + 4827	medium compact	290	9.1	Near	14
1420.2 + 4952	medium compact	90	1.4	VD	18
1422.0 + 4911	medium compact	125	2.2	VD	15
1422.9 + 4600	medium compact	126	2.1	VD	22
1424.4 + 4906	medium compact	161	2.5	D	13
1424.9 + 4941	medium compact	124	1.9	ED	12
1427.5 + 4856	medium compact	105	1.8	ED	11
1428.6 + 4817	medium compact	62	3.5	VD	9
1429.1 + 4915	medium compact	95	1.8	ED	10
1429.4 + 4540	compact	220	3.6	VD	21
1429.5 + 4705	medium compact	171	5.6	D	7
1430.6 + 4959	compact	82	1.3	ED	8
1432.1 + 5000	medium compact	57	1.3	ED	6
1432.7 + 5023	medium compact	78	1.4	VD	5

Average number of galaxies per cluster = 124.8

## GALAXIES

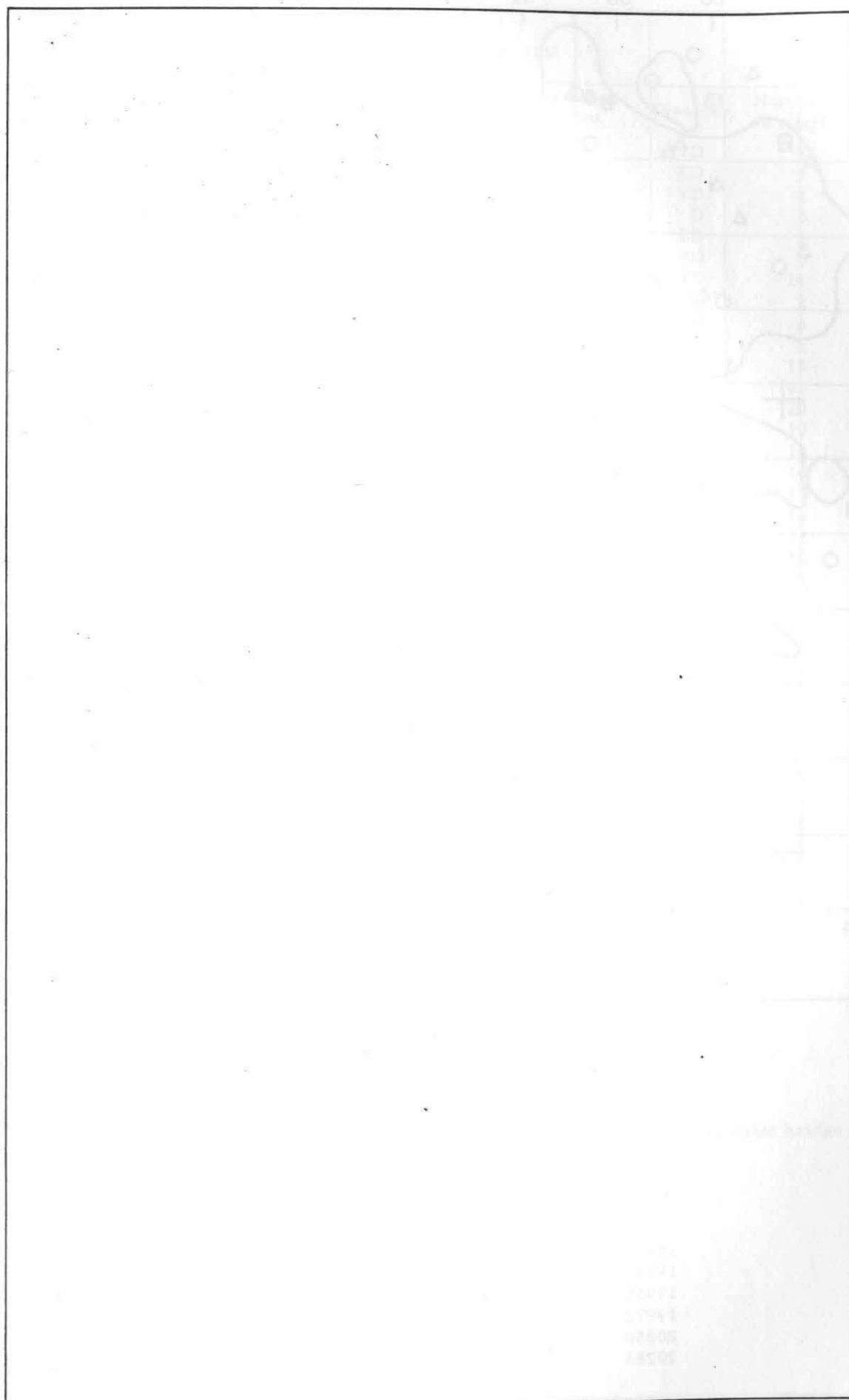
Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h	1950	$\delta$ m					
13	56.6	+46	30		15.7		
13	58.8	+48	41	5425	14.3		
14	00.0	+46	33	5439	14.6		
14	01.0	+49	25	5448	12.7	+1970	$m_H = 12.5$ S
14	07.2	+47	00		15.5		
14	07.5	+49	16		14.4		
14	08.4	+48	47	5500	14.5		
14	09.2	+49	12		15.7		diffuse
14	09.6	+50	27		15.1		
14	10.5	+44	42		15.6		
14	10.6	+45	55		14.1		double system, contact
14	10.7	+46	27		15.0		
14	11.9	+47	53		15.0		
14	13.2	+45	50		14.8		
14	13.5	+49	33		14.9		compact
14	13.7	+50	25		15.6		compact
14	17.2	+47	59		15.6		
14	17.5	+46	05		15.4		
14	17.5	+46	06		15.6		compact
14	17.9	+49	28		15.4		
14	18.2	+45	23		15.7		double nucleus, jet
14	20.4	+50	04		15.6		
14	20.6	+45	37		15.7		extremely diffuse spiral
14	20.7	+47	50		15.7		
14	20.9	+46	46		15.5		very compact
14	22.8	+44	45		13.9		

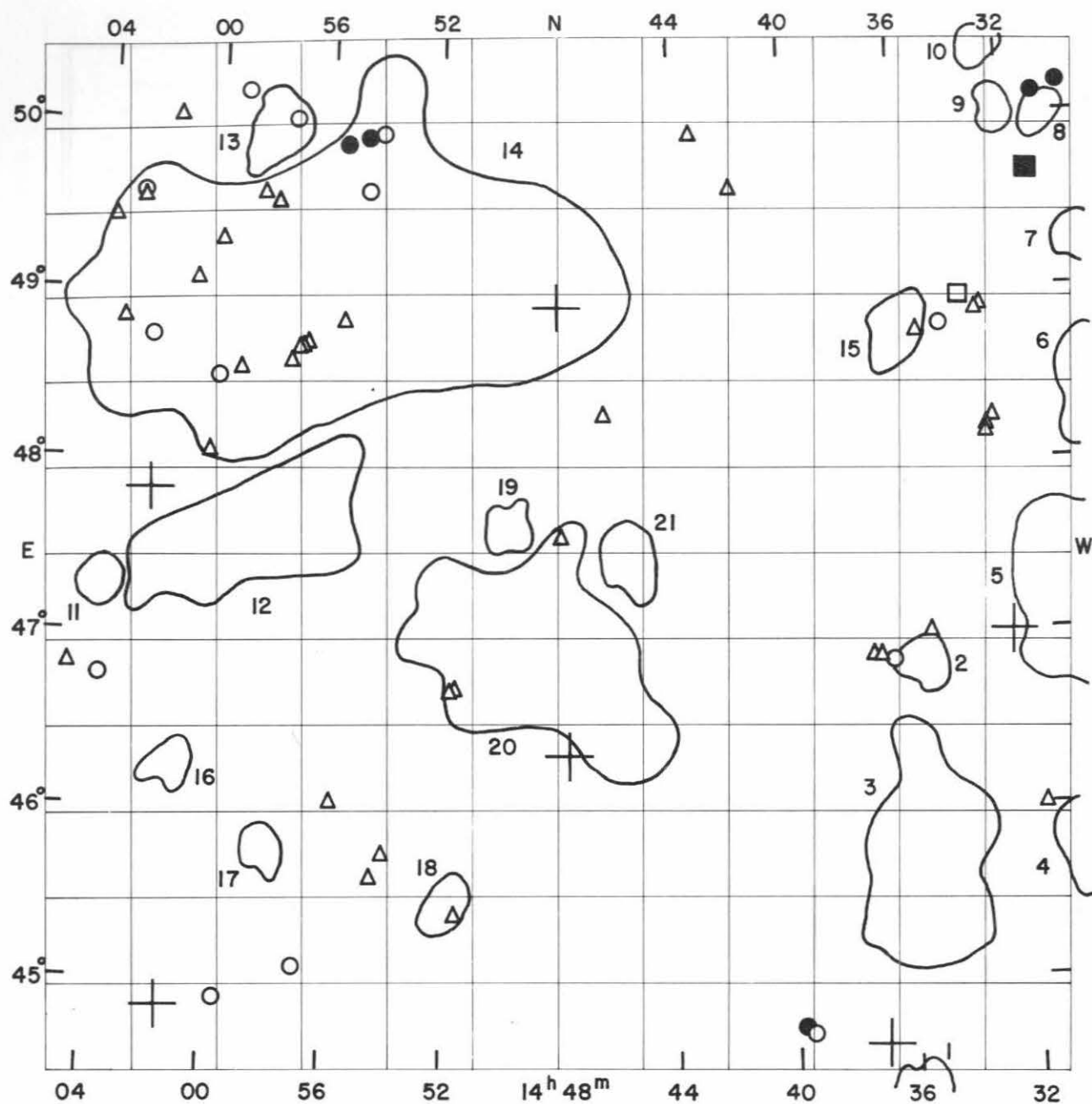
Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	'				
14	24.3	+49	45		15.7		
14	24.4	+48	47	5622	14.2		
14	24.6	+45	05		15.7		
14	25.6	+46	22	5633	12.9	+ 2353	$m_H = 12.8$ Sb
14	26.6	+49	46		15.6		
14	27.4	+44	55		15.2		
14	27.5	+45	18		15.1		
14	28.0	+44	40		15.7		disrupted spiral
14	28.0	+49	50	5660	12.2		$m_H = 12.3$ Sc
14	28.3	+45	46		15.2		
14	28.5	+48	17		15.7		compact
14	29.5	+47	43		15.5		
14	29.8	+50	10	5673	14.0		
14	30.4	+46	08		15.3		
14	30.7	+50	07	1029*	13.7		
14	31.0	+49	40	5676	11.7	+ 2244	$m_H = 11.9$ Sc

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5448	-	-	-	-	12.2	Sa	-	-
5633	-	-	13.06	Sb	12.9	Sb	-	-
5676	-	-	11.85	Sc	11.7	Sc	-	-







FIELD No. 248

$14^{\text{h}}48^{\text{m}} + 47^{\circ}30'$

Survey Plate No. 1368

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
19654	14	32	15.7	+	47	00 17	6.57
19747	14	36	58.5	+	44	37 10	5.39
19959	14	47	31.7	+	46	19 25	5.76
19972	14	47	59.2	+	48	55 31	6.1
20258	15	01	20.5	+	44	50 20	6.43
20281	15	02	08.3	+	47	50 53	4.86

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1428.6 + 4817	medium compact	62	3.5	VD	6
1429.1 + 4915	medium compact	95	1.8	ED	7
1429.4 + 4540	compact	220	3.6	VD	4
1429.5 + 4705	medium compact	171	5.6	D	5
1430.6 + 4959	compact	82	1.3	ED	8
1432.1 + 5000	medium compact	57	1.3	ED	9
1432.7 + 5023	medium compact	78	1.4	VD	10
1435.4 + 4649	compact	76	1.6	ED	2
1435.5 + 4538	medium compact	122	5.5	MD	3
1435.9 + 4417	medium compact	78	2.0	ED	1
1435.9 + 4845	compact	95	2.1	VD	15
1445.5 + 4726	compact	87	2.1	VD	21
1448.8 + 4654	medium compact	143	7.0	Near	20
1449.6 + 4738	compact	67	1.5	ED	19
1451.7 + 4526	medium compact	113	1.6	ED	18
1456.2 + 4901	open	209	12.5	Near	14
1458.0 + 4544	compact	70	1.4	ED	17
1458.2 + 4956	compact	163	2.2	VD	13
1458.6 + 4735	medium compact	263	5.3	MD	12
1501.1 + 4613	medium compact	81	1.5	ED	16
1503.8 + 4716	compact	73	1.5	ED	11

Average number of galaxies per cluster = 114.5

## GALAXIES

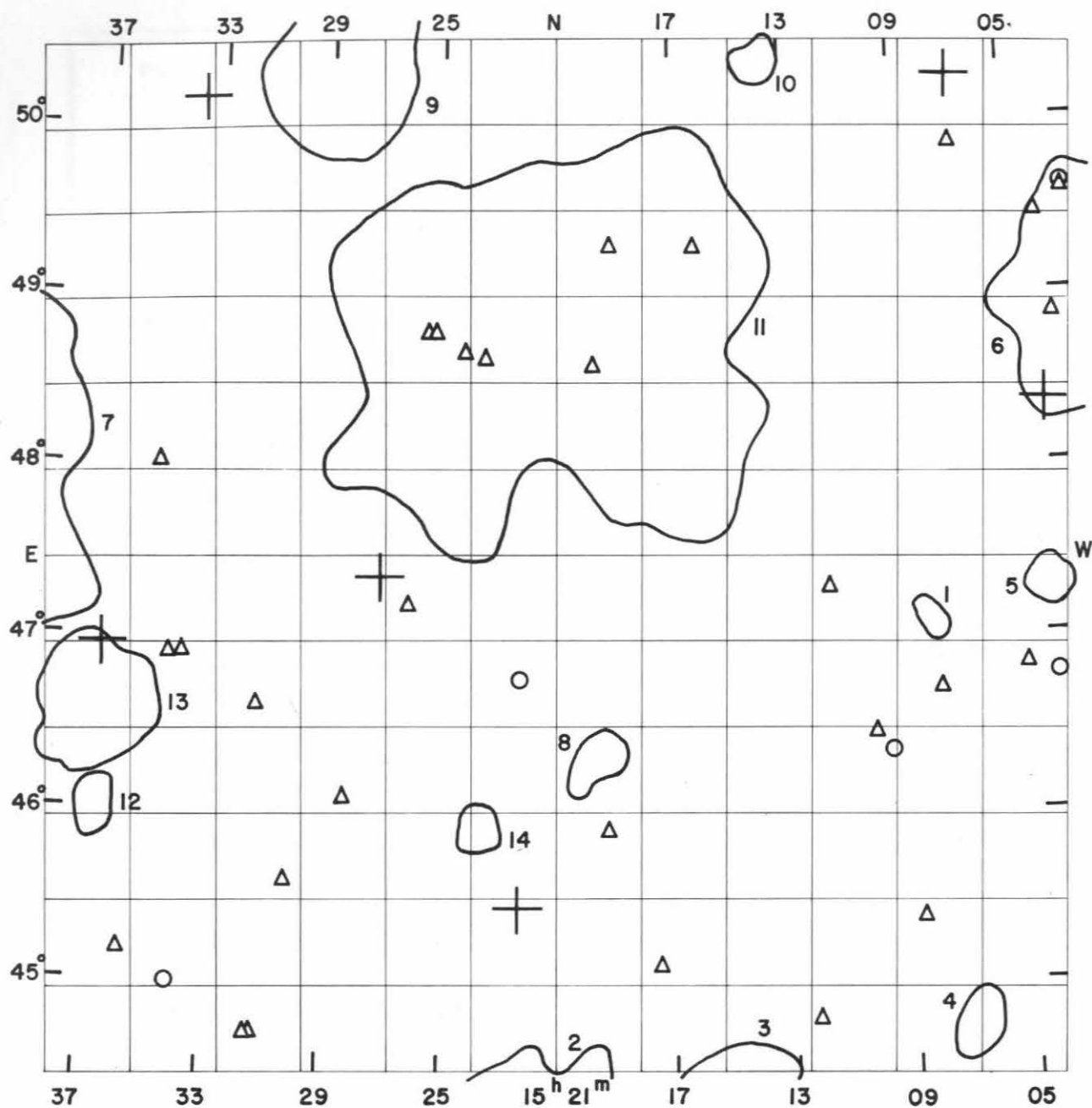
Position $\alpha$ 1950 $\delta$ h m o s	NGC IC*	$m_p$	$V_s$ km/sec	Remarks
14 29.8 + 50 10	5673	14.0		
14 30.7 + 50 07	1029*	13.7		
14 31.0 + 49 40	5676	11.7	+ 2244	$m_H = 11.9$ Sc
14 31.4 + 46 00		15.7		compact
14 32.6 + 48 15	1031*	15.4		
14 32.8 + 48 11	1032*	15.6		
14 32.9 + 48 09	1033*	15.3		
14 33.0 + 48 53	5682	15.1		
14 33.1 + 48 52	5683	15.5		
14 33.7 + 48 57	5689	12.7	+ 2205	$m_H = 12.6$ SBa
14 34.4 + 48 47	5693	14.5		
14 35.1 + 47 00		15.7		
14 35.3 + 48 45	5700	15.2		
14 36.4 + 46 51	5714	14.2		
14 36.8 + 46 53	5717	15.4		
14 37.1 + 46 53	5721+5723	15.3		double system, very faint bridge
14 39.4 + 44 42		14.8		
14 39.7 + 44 44		13.9		
14 41.8 + 49 36		15.5		
14 43.2 + 49 55		15.4		
14 46.4 + 48 17		15.3		
14 47.9 + 47 35	5767	15.1		
14 51.4 + 46 41		15.7		
14 51.5 + 45 23		15.6		
14 51.6 + 46 41		15.6		
14 53.9 + 45 45		15.5		
14 54.1 + 49 56	5794	14.5		

Position a 1950 $\delta$				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	'				
14	54.2	+45	37		15.2		
14	54.6	+49	36		14.7		
14	54.7	+49	54	5797	13.6		
14	55.4	+48	50		15.6		
14	55.4	+49	52	5804	14.0		
14	55.7	+46	03		15.1		
14	56.7	+48	41		15.5		
14	56.8	+48	40		15.7		
14	56.9	+45	05		14.6		
14	57.0	+48	40		15.6		compact
14	57.2	+48	36		15.4		
14	57.2	+50	01	5818	15.0		
14	57.9	+49	31		15.2		
14	58.3	+49	35		15.7		
14	59.0	+48	33		15.5		
14	59.0	+50	11	5828	14.3		double system
14	59.4	+44	54		14.3		
14	59.8	+48	31		14.9		
14	59.8	+49	18		15.3		
15	00.1	+48	04	5830	15.2		
15	00.7	+49	04	5835	15.7		
15	01.5	+50	02		15.6		
15	02.2	+48	44		15.0		
15	02.8	+49	34		15.2		
15	02.8	+49	36		14.8		
15	03.3	+48	51		15.7		
15	03.7	+46	46		15.0		
15	03.8	+49	27		15.3		
15	04.8	+46	50		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES							
NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958
5676	-	-	11.85	Sc	11.7	Sc	- -
5689	-	-	12.84	S0	12.9	S0	- -

1000  
1000  
1000  
1000  
1000  
1000  
1000



FIELD No. 249  
 $15^{\text{h}}21^{\text{m}} + 47^{\circ}30'$   
 Survey Plate No. 706

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
20308	15	03	46.4	+	48	20 36	5.59
20380	15	06	44.2	+	50	14 43	6.27
20720	15	22	23.8	+	45	26 48	6.24
20825	15	27	07.8	+	47	22 22	5.96
20970	15	33	42.4	+	50	09 39	7.09
21044	15	36	40.0	+	46	57 41	5.78

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1456.2 + 4901	open	209	12.5	Near	6
1503.8 + 4716	compact	73	1.5	ED	5
1507.0 + 4443	medium compact	100	1.8	VD	4
1508.0 + 4706	compact	64	1.1	ED	1
1513.8 + 5020	compact	86	1.4	ED	10
1514.8 + 4408	open	109	4.2	D	3
1519.5 + 4618	medium compact	116	1.6	ED	8
1521.0 + 4844	open	230	13.3	Near	11
1521.8 + 4410	open	144	4.5	D	2
1523.5 + 4555	medium compact	87	1.4	ED	14
1528.7 + 5019	open	126	5.4	MD	9
1536.5 + 4636	medium compact	128	4.2	MD	13
1536.6 + 4600	medium compact	98	1.5	VD	12
1540.9 + 4758	open	152	9.0	Near	7

Average number of galaxies per cluster = 123.0

## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
15	02.8	+49	34		15.2		
15	02.8	+49	36		14.8		
15	03.3	+48	51		15.7		
15	03.7	+46	46		15.0		
15	03.8	+49	27		15.3		
15	04.8	+46	50		15.6		
15	06.8	+49	52		15.4		
15	07.9	+46	42		15.4		compact
15	08.6	+45	22		15.6		diffuse spiral
15	09.5	+46	20		14.1		
15	10.1	+46	27		15.4		
15	11.6	+47	18		15.7		
15	12.2	+44	47		15.5		
15	16.1	+49	16		15.7		very diffuse
15	17.5	+45	06		15.7		very diffuse spiral
15	17.7	+46	04	5918	14.0		
15	19.1	+49	17		15.4		
15	19.2	+45	55		15.1		double system
15	19.8	+48	35		15.7		
15	22.2	+46	47		14.8		
15	23.4	+48	38		15.5		
15	24.1	+48	40		15.7		
15	25.2	+48	47	5932	15.2		
15	25.4	+48	47	5933	15.7		extremely faint ejecta
15	26.1	+47	12		15.6		compact
15	28.3	+46	05		15.3		
15	30.2	+45	36		15.5		
15	31.2	+44	42		15.5		double system
15	31.3	+46	37		15.2		
15	31.4	+44	42		15.3		
15	33.8	+46	55		15.7		compact
15	34.0	+45	00		14.4		
15	34.3	+46	54		15.6		
15	34.8	+48	00		15.2		
15	35.7	+45	11		15.6		





## CLUSTERS OF GALAXIES

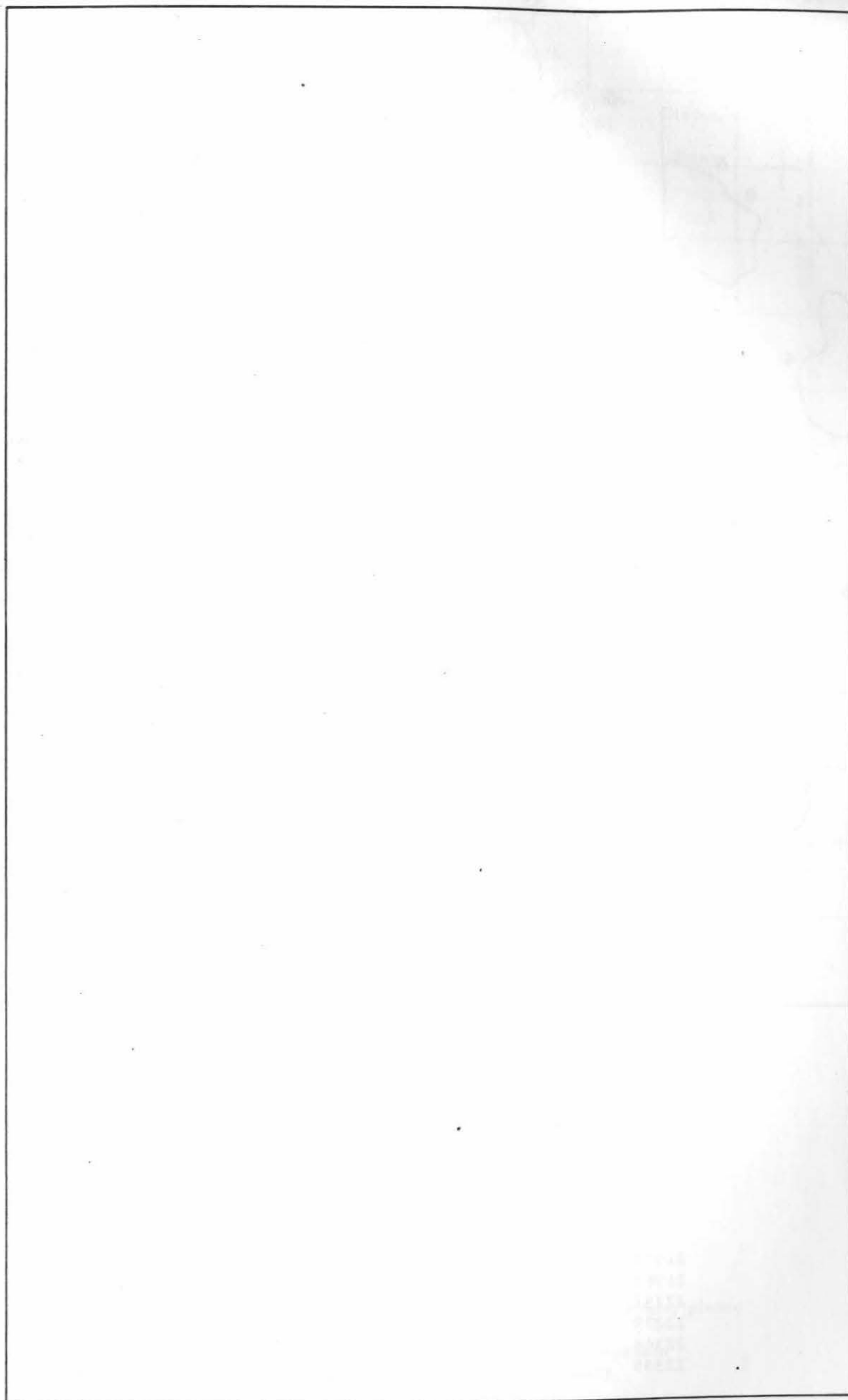
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1536.5 + 4636	medium compact	128	4.2	MD	11
1540.6 + 4815	medium compact	83	1.2	VD	9
1540.9 + 4758	open	152	9.0	Near	8
1550.6 + 4540	medium compact	81	2.8	D	3
1555.3 + 4529	compact	74	1.2	ED	7
1558.0 + 5021	compact	91	1.6	ED	6
1559.3 + 4615	medium compact	115	3.6	D	10
1606.0 + 4801	compact	111	1.5	ED	5
1607.1 + 4830	medium compact	108	1.6	ED	4
1610.3 + 4955	open	675	26.7	Near	2
1612.7 + 4645	medium compact	108	1.8	VD	1

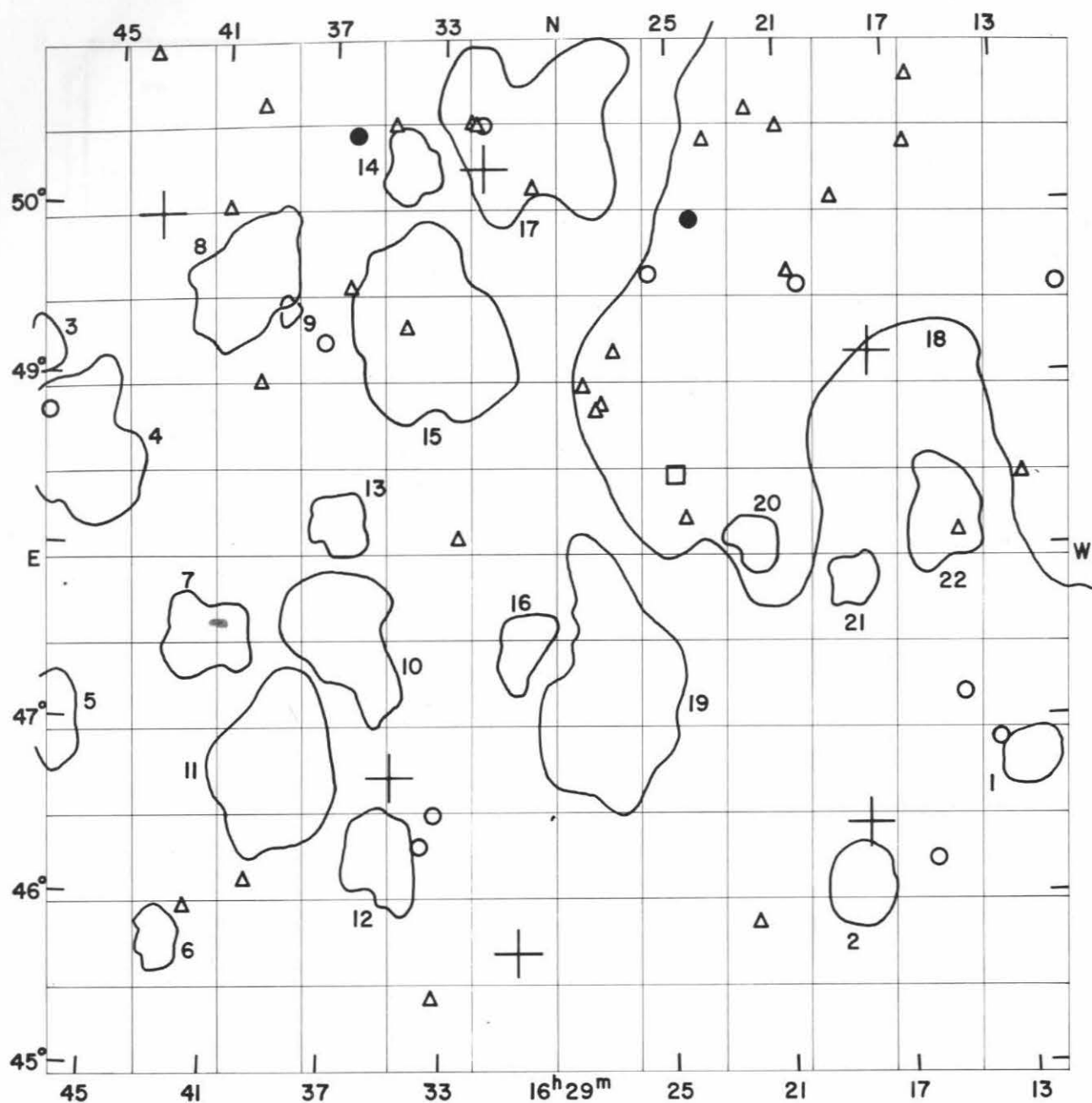
Average number of galaxies per cluster = 156.9

## GALAXIES

Position a 1950 $\delta$			NGC IC*	m <sub>P</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
15	38.5	+46 07		15.6		
15	40.2	+45 43		15.5		
15	40.5	+48 43		15.6		
15	40.8	+48 22		15.7		extremely faint jet
15	41.7	+47 54		15.4		
15	42.9	+47 10		15.3		
15	43.1	+46 14		15.4		
15	43.9	+49 27		15.7		
15	44.8	+45 17		15.6		
15	44.9	+46 09		15.0		
15	45.2	+44 59		15.7		
15	46.4	+45 09		15.7		double system
15	47.6	+44 51		15.5		
15	49.7	+47 23		13.6		
15	51.0	+46 29		15.7		double system, connected
15	52.3	+50 05		15.4		
15	53.1	+45 29		15.2		double system
15	53.5	+45 38		15.1		
15	53.8	+48 06		15.6		
15	53.9	+47 01		15.6		
15	54.2	+48 00		14.1		
15	54.3	+49 40		15.3		
15	54.6	+48 14		14.9		
15	55.2	+46 29		15.3		double system in halo
15	55.3	+48 14	1152*	14.4		
15	55.6	+48 18	1153*	13.6		
15	55.7	+48 19		15.1		
15	55.8	+47 18		14.9		
15	56.0	+48 24		15.6		
15	57.2	+48 49		14.3		
15	57.4	+44 54		15.5		
15	57.5	+46 10		15.6		compact
15	57.5	+48 40		15.5		
15	58.6	+46 55		15.4		
15	59.2	+48 42		15.0		
15	59.4	+45 33		15.5		
16	00.3	+47 31		15.5		

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
16	00.3	+48 58		15.7		
16	00.5	+47 14		15.2		double nebula
16	00.6	+48 48		15.3		
16	00.8	+49 20		15.6		diffuse
16	01.3	+47 21		14.6		double system
16	02.1	+49 28		14.3		
16	03.3	+49 35		15.4		double system
16	03.5	+45 35		15.4		
16	05.8	+48 42		15.7		extremely faint filament
16	07.6	+46 47		15.7		
16	09.6	+49 55		15.2		
16	10.9	+49 31		14.8		
16	12.4	+48 25		15.5		





FIELD No. 251

$16^{\text{h}}29^{\text{m}} + 48^{\circ}00'$

Survey Plate No. 1375

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
21974	16	17	47.2	+	49	09 25	6.19
21987	16	18	14.1	+	46	25 53	3.91
22251	16	30	16.8	+	45	42 11	5.55
22279	16	31	37.5	+	50	14 46	6.97
22344	16	34	43.5	+	46	42 49	5.95
22555	16	43	15.8	+	49	57 16	7.32

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1610.3 + 4955	open	675	26.7	Near	18
1612.7 + 4645	medium compact	108	1.8	VD	1
1615.3 + 4811	medium compact	90	2.9	VD	22
1618.6 + 4603	medium compact	120	2.3	ED	2
1618.6 + 4718	compact	68	1.5	VD	21
1622.1 + 4802	medium compact	105	1.6	VD	20
1627.0 + 4708	open	157	5.5	D	19
1629.7 + 5027	medium compact	147	5.5	Near	17
1630.1 + 4728	medium compact	94	1.9	ED	16
1633.5 + 4916	medium compact	150	5.5	D	15
1634.1 + 5014	medium compact	183	2.0	ED	14
1635.0 + 4613	compact	196	2.7	ED	12
1636.4 + 4729	medium compact	156	3.8	VD	10
1636.6 + 4809	compact	128	1.9	ED	13
1638.5 + 4922	compact	43	0.8	ED	9
1638.7 + 4643	compact	330	4.6	ED	11
1640.1 + 4932	medium compact	74	3.7	VD	8
1641.1 + 4729	compact	220	2.8	ED	7
1642.5 + 4544	medium compact	117	1.6	ED	6
1645.8 + 4835	medium compact	127	4.3	D	4
1646.4 + 4659	medium compact	93	2.4	D	5
1647.4 + 4908	medium compact	58	1.5	ED	3

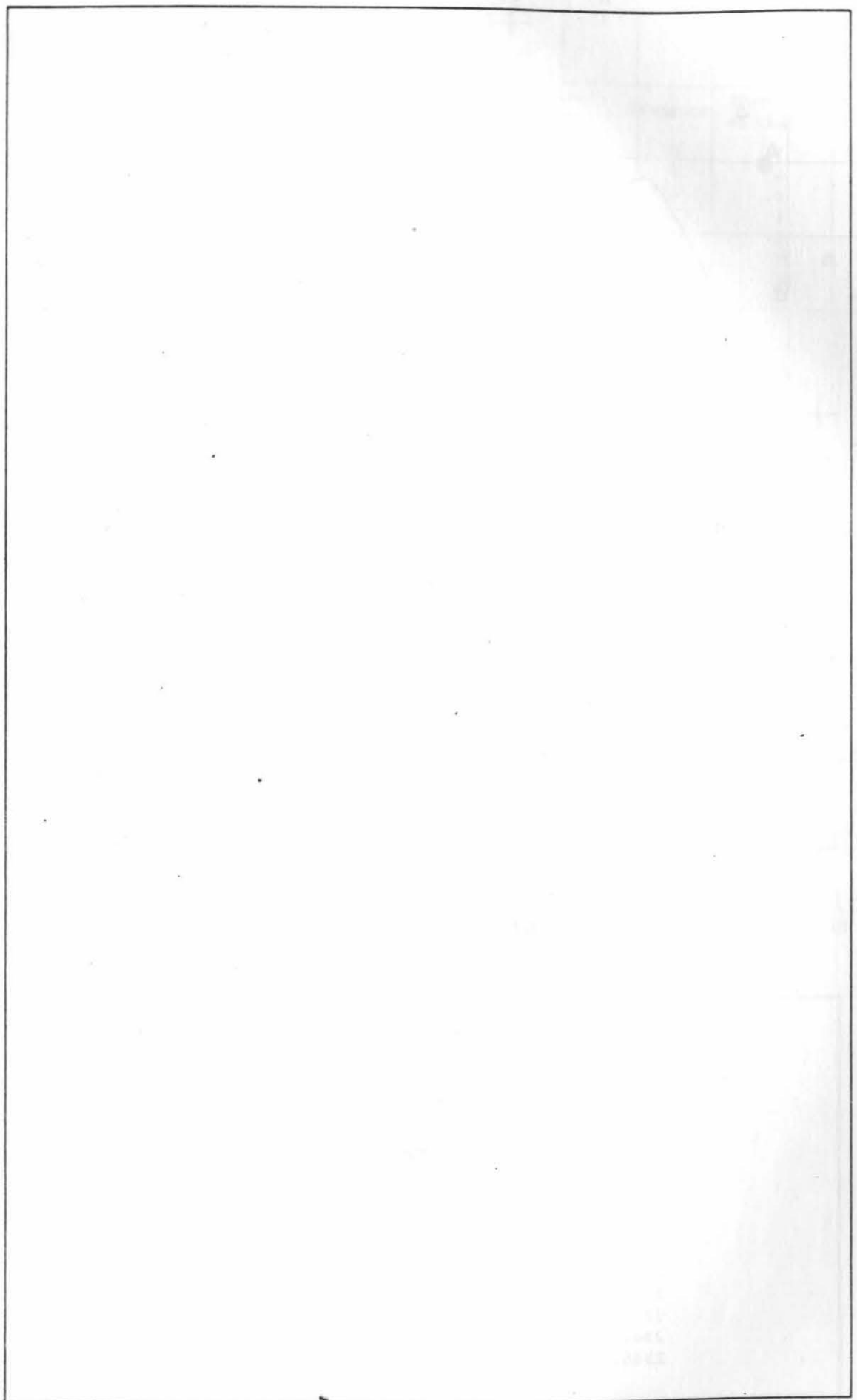
Average number of galaxies per cluster = 156.3

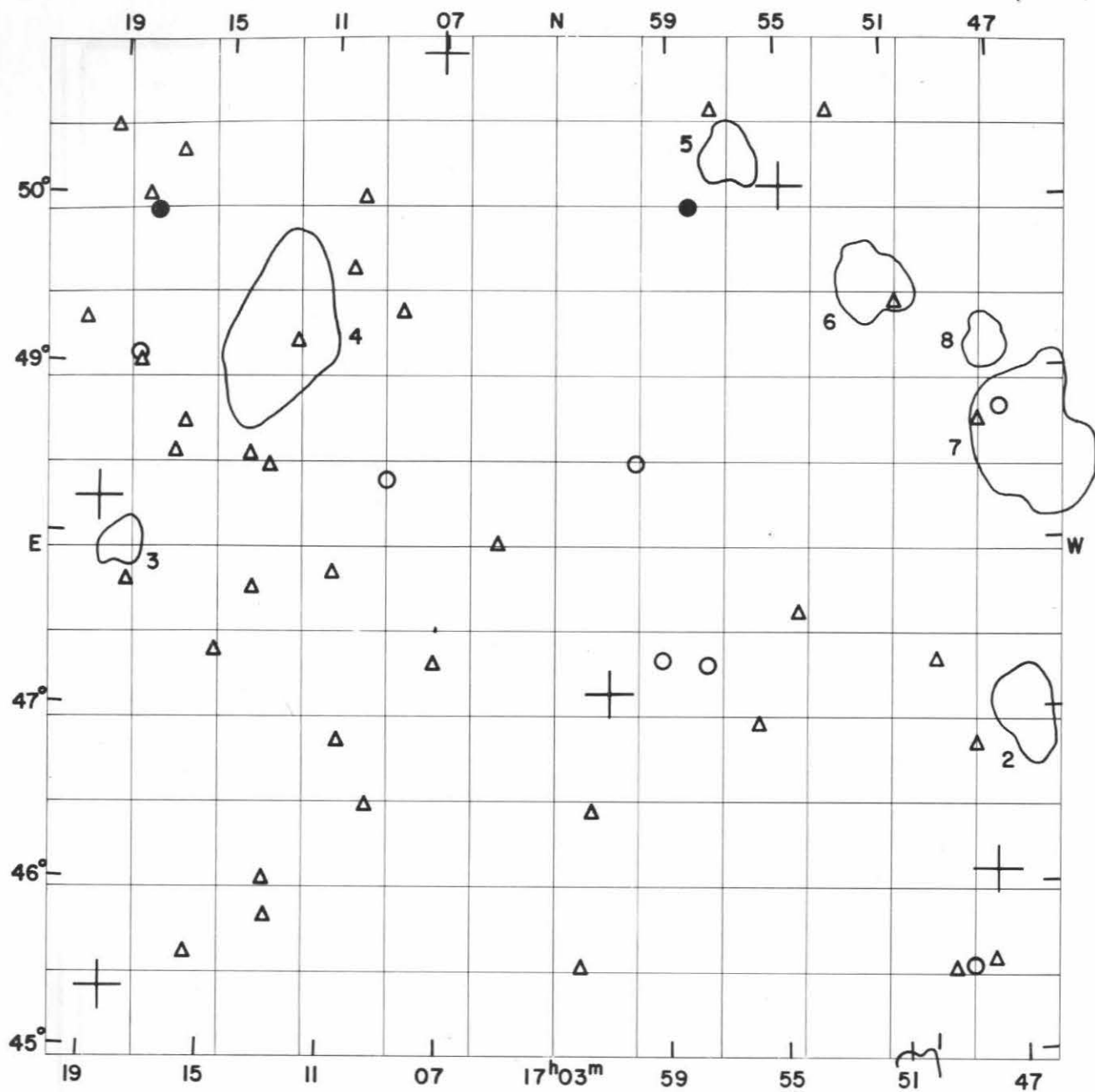
## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
16	10.9	+ 49 31		14.8		
16	12.4	+ 48 25		15.5		
16	13.6	+ 46 54		15.0		
16	14.8	+ 47 10		14.9		disrupted spiral
16	14.8	+ 48 06		15.6		
16	16.0	+ 46 13		14.5		double system
16	16.0	+ 50 45		15.6		
16	16.2	+ 50 21		15.5		
16	19.0	+ 50 03		15.4		compact
16	20.2	+ 49 33		15.0		
16	20.6	+ 49 37		15.5		diffuse
16	21.0	+ 50 29		15.7		
16	22.0	+ 50 35		15.6		compact
16	22.1	+ 45 51		15.3		
16	23.7	+ 50 25		15.6		
16	24.2	+ 49 57	6154	14.0		
16	24.4	+ 48 12		15.2		
16	24.7	+ 48 28	6155	13.0		
16	25.6	+ 49 38		14.7		
16	27.0	+ 49 10		15.7		
16	27.3	+ 48 52		15.6		
16	27.5	+ 48 50		15.5		
16	28.0	+ 48 58		15.7		double system, plume
16	29.8	+ 50 08		15.5		
16	31.6	+ 50 30		14.9		double system
16	31.9	+ 50 30		15.2		compact

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
16	32.0	+ 50 31		15.4		double system
16	32.4	+ 48 05		15.6		eccentric nucleus
16	33.2	+ 45 25		15.3		diffuse
16	33.2	+ 46 30	1221*	14.7		
16	33.6	+ 46 19	1222*	14.6		
16	34.3	+ 49 19	1223*	15.4		
16	34.8	+ 50 30		15.5		diffuse
16	36.2	+ 50 26		13.9		
16	36.3	+ 49 32		15.7		
16	37.2	+ 49 14		14.8		
16	39.5	+ 48 59		15.7		
16	39.6	+ 46 06	1226*	15.4		
16	39.6	+ 50 36		15.4		
16	40.8	+ 50 00		15.7		
16	41.6	+ 45 56		15.3		
16	43.8	+ 50 54		15.6		very compact
16	47.0	+ 48 47		14.6		extremely compact

An area of about 1/2 square degree in the S.W. corner of this plate is not covered by any of the adjacent fields. It is outlined by  $16^{\text{h}}11^{\text{m}} < \alpha < 16^{\text{h}}17^{\text{m}}$ ,  $44^{\circ}30' < \delta < 45^{\circ}00'$  and contains no galaxies bright enough for this catalogue. The only cluster of galaxies touching the area is No. 8 of Field No. 223 whose contour line is plotted in its entirety on the chart of that field.





FIELD No. 252

$17^{\text{h}}03^{\text{m}} + 48^{\circ}00'$

Survey Plate No. 1370

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
22662	16	47	46.3	+ 46 04 10	4.86
22852	16	54	49.5	+ 50 06 58	6.70
23011	17	01	11.6	+ 47 08 23	6.74
23147	17	07	03.4	+ 50 54 17	6.28
23433	17	18	23.9	+ 45 21 24	6.65
23461	17	19	12.5	+ 48 14 13	6.32



## CLUSTERS OF GALAXIES

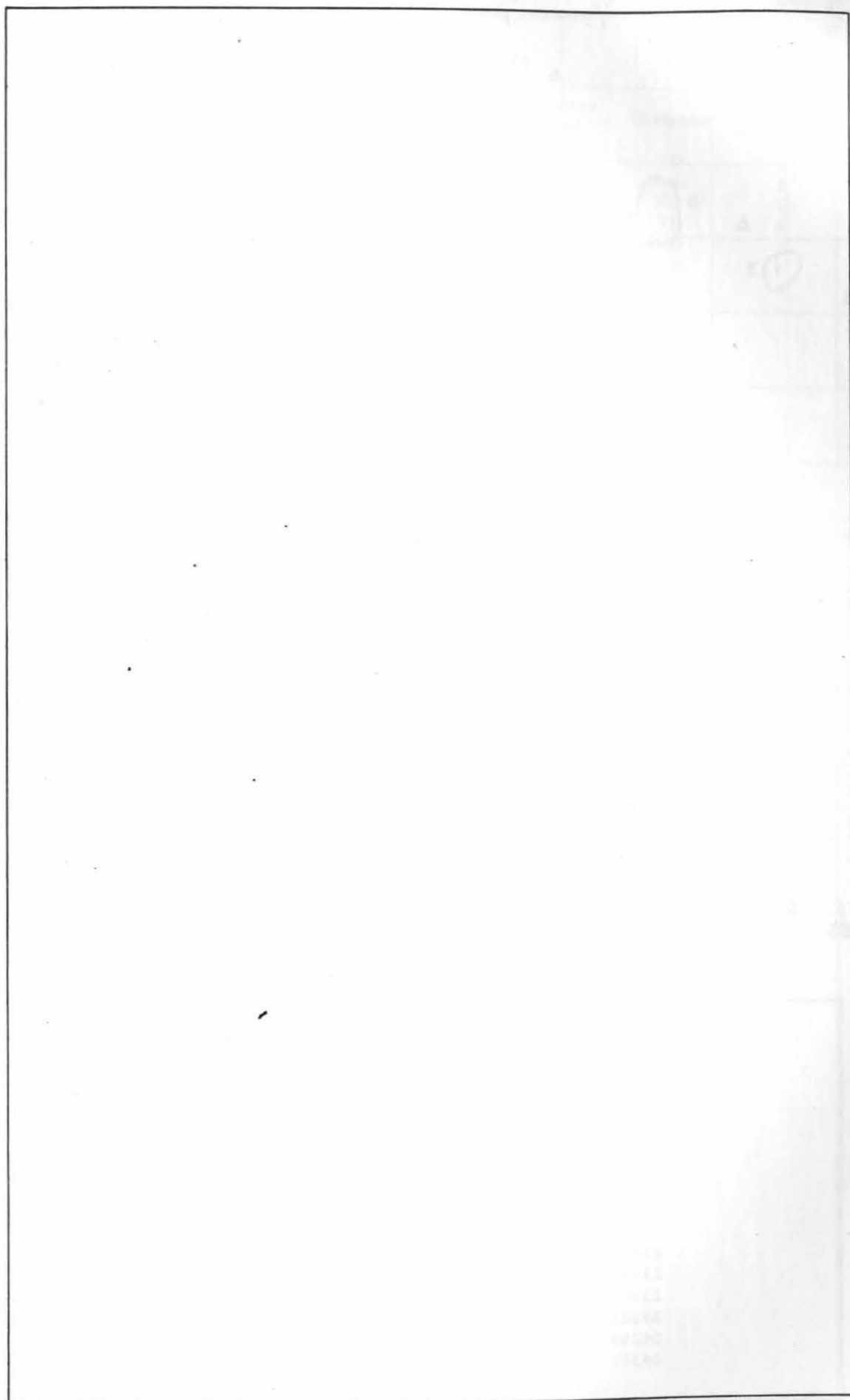
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1645.8 + 4835	medium compact	127	4.3	D	7
1646.4 + 4659	medium compact	93	2.4	D	2
1647.4 + 4908	medium compact	58	1.5	ED	8
1650.7 + 4453	compact	98	1.3	ED	1
1651.4 + 4930	medium compact	139	2.3	VD	6
1656.6 + 5016	medium compact	107	1.8	VD	5
1712.9 + 4913	medium compact	116	4.4	D	4
1718.2 + 4757	medium compact	88	1.4	ED	3

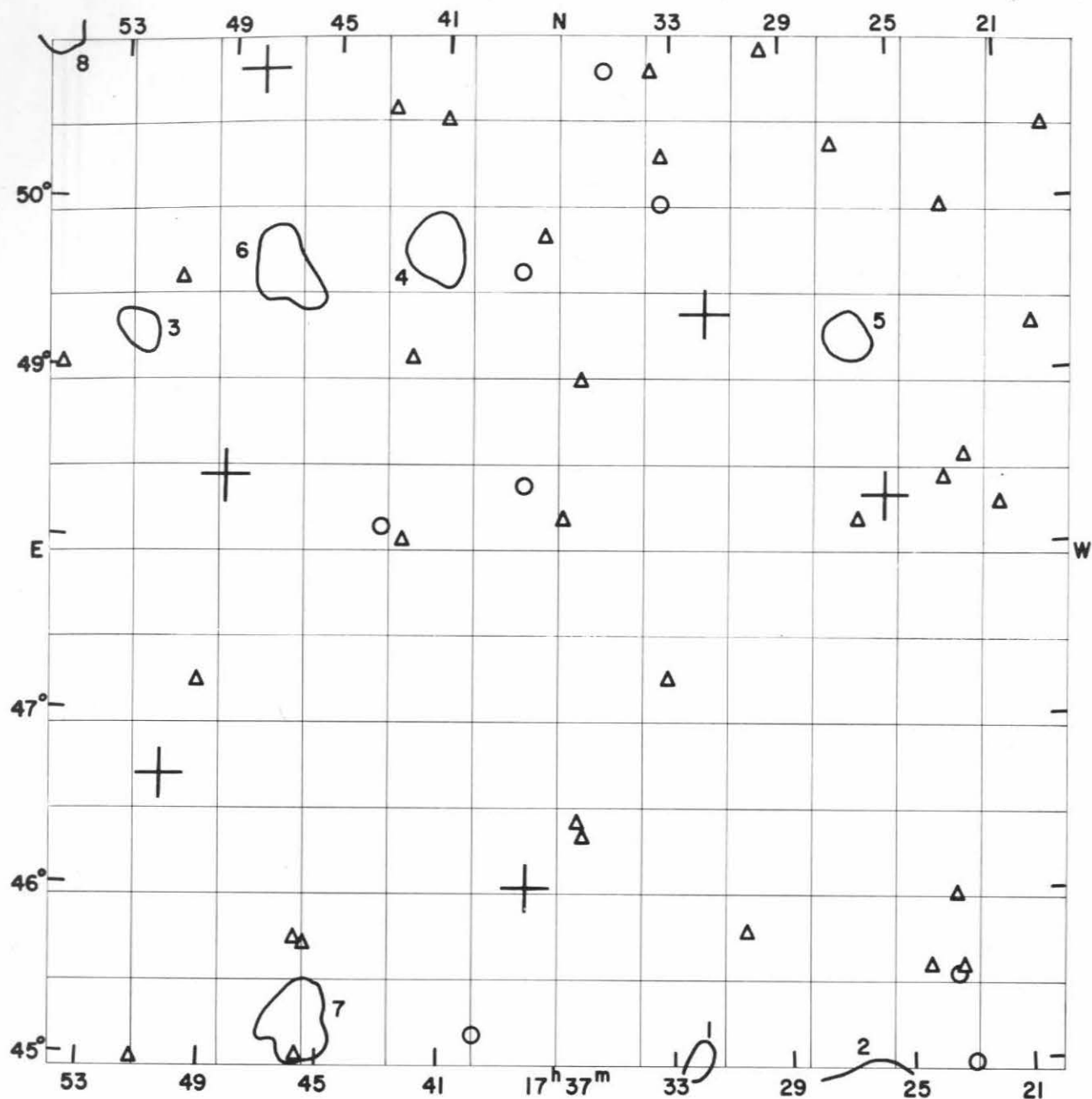
Average number of galaxies per cluster = 103.3

## GALAXIES

Position α 1950 δ	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h m o r				
16 47.0 + 48 47		14.6		extremely compact
16 47.8 + 48 43		15.4		
16 48.0 + 45 33		15.4		double system, bridge
16 48.4 + 46 48		15.6		double system, bridge
16 48.7 + 45 30	6241	14.8		
16 49.3 + 45 29		15.1		diffuse spiral
16 49.6 + 47 18		15.2		triple system, bridges
16 50.7 + 49 24		15.7		diffuse spiral
16 53.0 + 50 33		15.6		
16 54.4 + 47 36		15.6		
16 55.8 + 46 56		15.6		
16 57.3 + 50 34		15.6		compact
16 57.6 + 47 18	6279	14.9		
16 58.2 + 50 00	6283	13.7		
16 59.2 + 47 20		14.7		extremely compact
17 00.2 + 48 30		15.0		compact
17 01.7 + 46 27		15.3		
17 02.1 + 45 32		15.7		
17 05.1 + 48 01		15.5		
17 07.3 + 47 18		15.6		
17 08.5 + 49 22		15.4		
17 09.0 + 48 23	6313	14.8		
17 09.6 + 46 28		15.6		compact
17 10.0 + 50 02		15.4		
17 10.3 + 49 37		15.5		
17 10.5 + 46 51		15.7		diffuse
17 10.9 + 47 50		15.5		double system
17 12.3 + 49 11		15.3		
17 12.9 + 45 49		15.3		compact
17 13.0 + 46 02		15.7		
17 13.2 + 48 27		15.4		
17 13.7 + 47 44		15.3		compact
17 13.9 + 48 30		15.7		
17 14.9 + 47 21		15.5		
17 15.6 + 45 35		15.7		compact
17 16.3 + 48 41		15.1		
17 16.6 + 48 31		15.2		very compact
17 16.8 + 50 17		15.1		compact
17 17.6 + 49 55		13.9		
17 17.9 + 49 01		15.5		compact

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
17	18.0	+ 49	05		14.9		spiral, very long jet
17	18.0	+ 50	00		15.6		compact
17	18.2	+ 47	45		15.2		
17	19.2	+ 50	25		15.3		
17	20.0	+ 49	17		15.5		





FIELD No. 253

$17^{\text{h}}37^{\text{m}} + 48^{\circ}00'$

Survey Plate No. 769

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
23658	17	25	24.6	+	48	18 04	5.81
23813	17	31	45.8	+	49	22 43	7.27
23965	17	38	03.1	+	46	01 55	3.79
24221	17	47	52.5	+	50	47 31	5.19
24253	17	48	44.7	+	48	24 24	6.43
24317	17	50	37.7	+	46	39 20	6.57

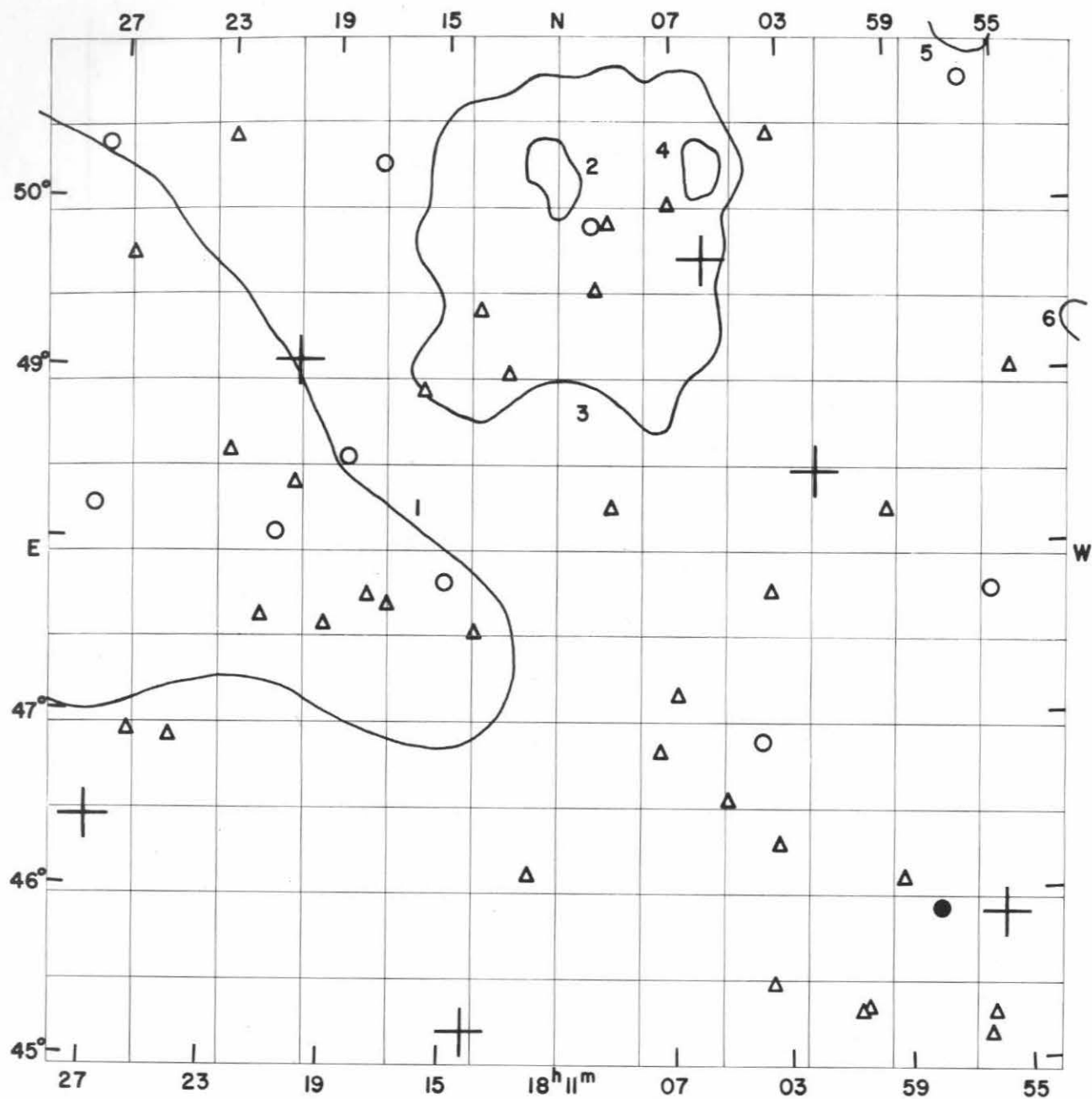
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1726.7 + 4913	medium compact	71	1.4	VD	5
1728.5 + 4353	medium compact	157	11.2	Near	2
1732.1 + 4500	compact	47	1.0	ED	1
1741.5 + 4945	medium compact	94	2.0	VD	4
1745.8 + 4513	medium compact	107	2.3	MD	7
1746.9 + 4935	medium compact	90	2.1	D	6
1752.1 + 4914	compact	65	1.2	ED	3
1756.0 + 5114	medium compact	80	3.0	VD	8

Average number of galaxies per cluster = 88.9

## GALAXIES

Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
17	19.2	+ 50 25		15.3		
17	20.0	+ 49 17		15.5		
17	21.4	+ 48 15		15.3		
17	22.6	+ 48 31		15.4		
17	23.0	+ 45 00		14.4		
17	23.1	+ 49 59		15.7		
17	23.2	+ 45 33		15.5		
17	23.3	+ 48 23		15.5		
17	23.4	+ 45 30		14.7		
17	23.4	+ 45 59		15.5		
17	24.3	+ 45 34		15.6		compact
17	26.4	+ 48 10		15.6		
17	27.1	+ 50 20		15.7		very compact
17	29.6	+ 50 55		15.3		
17	30.5	+ 45 46		15.7		
17	33.1	+ 47 15		15.5		
17	33.3	+ 50 01		14.8		
17	33.3	+ 50 17		15.1		
17	33.7	+ 50 47		15.4		
17	35.4	+ 50 48	6409	14.8		
17	36.1	+ 46 20		15.2		
17	36.2	+ 48 59		15.6		diffuse spiral
17	36.3	+ 46 25		15.4		
17	36.9	+ 48 10		15.7		compact
17	37.5	+ 49 48		15.7		
17	38.2	+ 48 22		14.9		
17	38.3	+ 49 38		15.0		
17	39.7	+ 45 10		14.9		
17	41.0	+ 50 30		15.6		
17	42.2	+ 49 07		15.4		
17	42.5	+ 48 03		15.1		
17	43.0	+ 50 34		15.5		diffuse spiral
17	43.2	+ 48 07	6443	14.8		
17	45.5	+ 45 42		15.6		
17	45.7	+ 45 01		15.3		
17	45.9	+ 45 43		15.3		
17	49.5	+ 47 12		15.2		
17	50.6	+ 49 32		15.2		
17	51.2	+ 44 59		15.5		
17	54.8	+ 49 02		15.5		



FIELD No. 254

$18^{\text{h}}11^{\text{m}} + 48^{\circ}00'$

Survey Plate No. 130

GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
24444	17	55	40.1	+ 45 51 32	6.77
24607	18	01	50.5	+ 48 27 40	6.06
24722	18	05	51.3	+ 49 42 08	6.31
24937	18	14	06.3	+ 45 11 34	6.30
25085	18	20	15.8	+ 49 05 44	5.09
25238	18	27	11.4	+ 46 23 22	7.18

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1752.1 + 4914	compact	65	1.2	ED	6
1756.0 + 5114	medium compact	80	3.0	VD	5
1805.8 + 5014	compact	86	1.7	VD	4
1810.2 + 4949	medium compact	149	10.8	Near	3
1811.1 + 5011	medium compact	89	1.9	VD	2
1916.8 + 4855	medium compact	3755	73.7	Near	1*

Average number of galaxies per cluster = 704.0

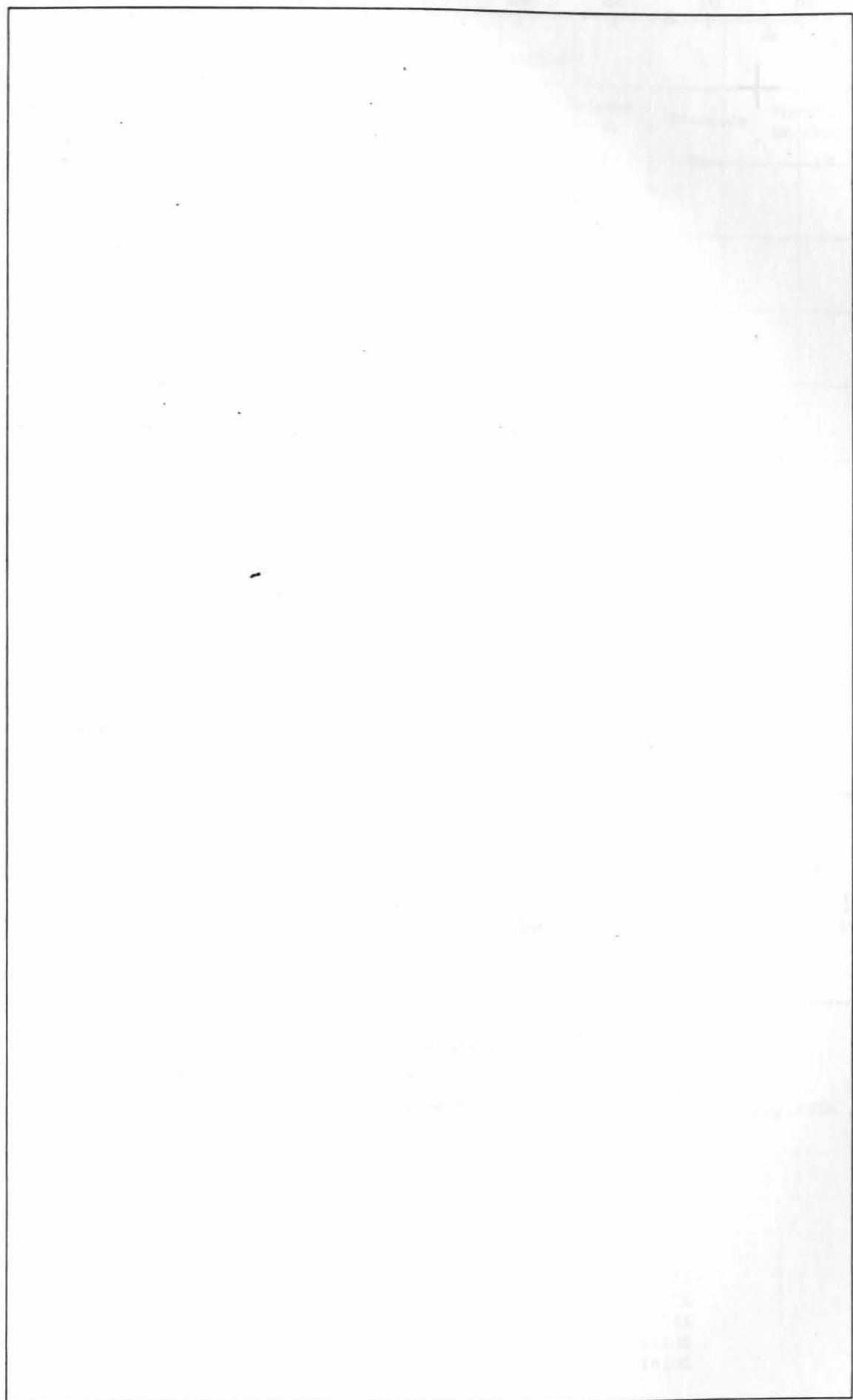
\*) see special map on page 386

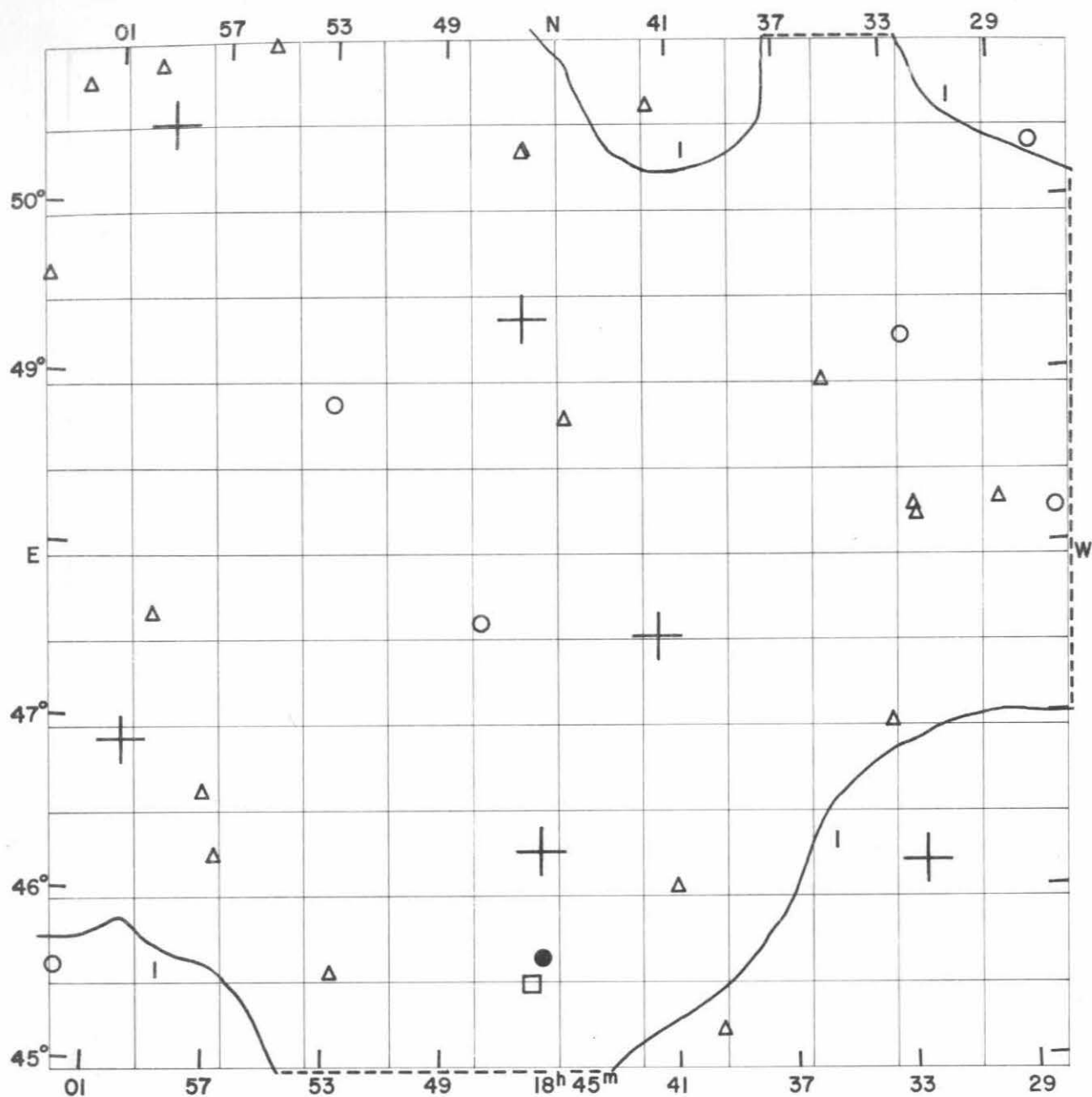
## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
17	54.8	+49 02		15.5		
17	55.7	+47 45		14.9		
17	56.1	+45 16		15.7		compact
17	56.2	+50 44	6515	14.3		
17	56.3	+45 08		15.4		double system
17	57.8	+45 55	6524	14.0		
17	59.1	+46 05		15.7		
17	59.3	+48 13		15.2		
18	00.4	+45 18		15.3		
18	00.6	+45 17		15.1		
18	03.3	+46 16		15.3		
18	03.4	+50 25		15.7		
18	03.5	+47 45		15.6		triple system
18	03.6	+45 27		15.5		double system, bridge
18	03.9	+46 52	6560	14.2		
18	05.1	+46 32		15.7		compact
18	06.8	+47 09		15.7		
18	07.0	+50 01		15.6		very compact
18	07.4	+46 49		15.3		quadruple system
18	09.1	+48 15		15.7		
18	09.2	+49 54		15.4		compact
18	09.7	+49 30		15.5		
18	09.8	+49 53	6582	14.8		double system in halo
18	12.0	+46 07		15.4		
18	12.8	+49 02		15.4		
18	13.7	+49 24		15.6		
18	13.9	+47 31		15.6		
18	15.0	+47 49		14.6		
18	15.8	+48 55		15.7		diffuse spiral
18	16.9	+47 41		15.7		double system
18	17.4	+50 15		14.4		
18	17.6	+47 44		15.6		diffuse
18	18.3	+48 32		14.5		
18	19.1	+47 33		15.6		compact
18	20.3	+48 22		15.3		compact
18	20.9	+48 05		14.6		
18	21.4	+47 35		15.2		
18	22.6	+48 33		15.5		
18	22.9	+50 23		15.5		
18	24.4	+46 51		15.6		

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	'				
18	25.9	+46	53		15.3		
18	26.4	+49	41		15.7		
18	27.4	+48	13		14.9		
18	27.6	+50	20		15.0		







FIELD No. 255  
 $18^{\text{h}}45^{\text{m}} + 48^{\circ}00'$   
 Survey Plate No. 770

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
25379	18	32	22.8	+	46	10 44	6.66
25627	18	41	28.5	+	47	31 25	6.89
25755	18	45	33.7	+	46	15 33	6.47
25773	18	46	12.0	+	49	22 32	7.18
26138	18	58	58.3	+	50	27 42	5.24
26181	19	00	01.4	+	46	51 47	5.06

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1*

Average number of galaxies per cluster = 3755.0

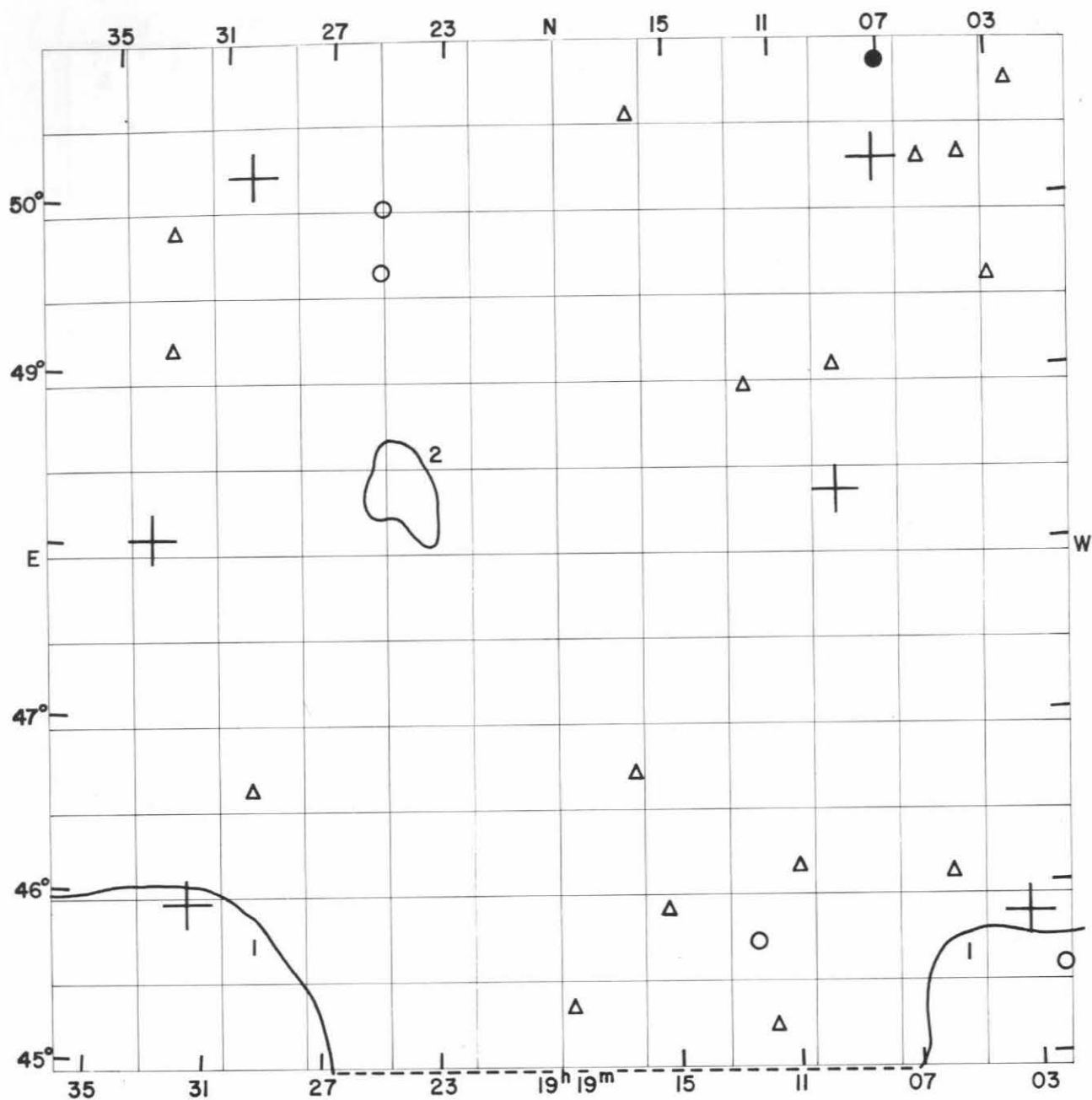
\*) see special map on page 386

## GALAXIES

Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
18	27.4	+ 48 13		14.9		
18	27.6	+ 50 20		15.0		
18	29.3	+ 48 16		15.3		
18	32.3	+ 48 11		15.3		
18	32.4	+ 48 15		15.6		
18	32.6	+ 49 14	1291*	14.2		
18	33.4	+ 47 00		15.5		diffuse spiral
18	35.5	+ 48 59		15.7		
18	39.5	+ 45 13		15.5		diffuse spiral
18	41.0	+ 46 04		15.7		
18	41.7	+ 50 37		15.6		double system, contact
18	44.8	+ 48 47		15.4		
18	45.6	+ 45 40	6702	13.8	+ 4728	
18	45.9	+ 45 30	6703	12.4	+ 2355	
18	46.1	+ 50 21		15.6		
18	46.2	+ 50 20		15.3		
18	47.6	+ 47 36	6711	14.1		
18	52.7	+ 45 32		15.7		
18	52.9	+ 48 51		14.3		
18	55.3	+ 50 57		15.3		
18	56.7	+ 46 12		15.7		
18	57.2	+ 46 34		15.6		
18	59.1	+ 47 36		15.7		compact
18	59.5	+ 50 48		15.1		
19	02.0	+ 45 33		15.0		double system
19	02.2	+ 50 42		15.4		
19	03.3	+ 49 34		15.1		triple system, bridges

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6702	-	-	13.95	E2	14.0	E2	-	-
6703	-	-	13.02	S0	12.5	S0	-	-



FIELD No. 256  
 $19^h 19^m + 48^{\circ} 00'$   
 Survey Plate No. 814

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
26268	19	03	05.5	+	45	50 41	6.82
26399	19	07	16.7	+	50	16 56	6.79
26437	19	09	05.6	+	48	21 39	7.18
26990	19	29	59.8	+	50	11 55	5.73
27029	19	31	38.4	+	45	55 48	7.40
27078	19	33	14.5	+	48	03 17	6.70

## CLUSTERS OF GALAXIES

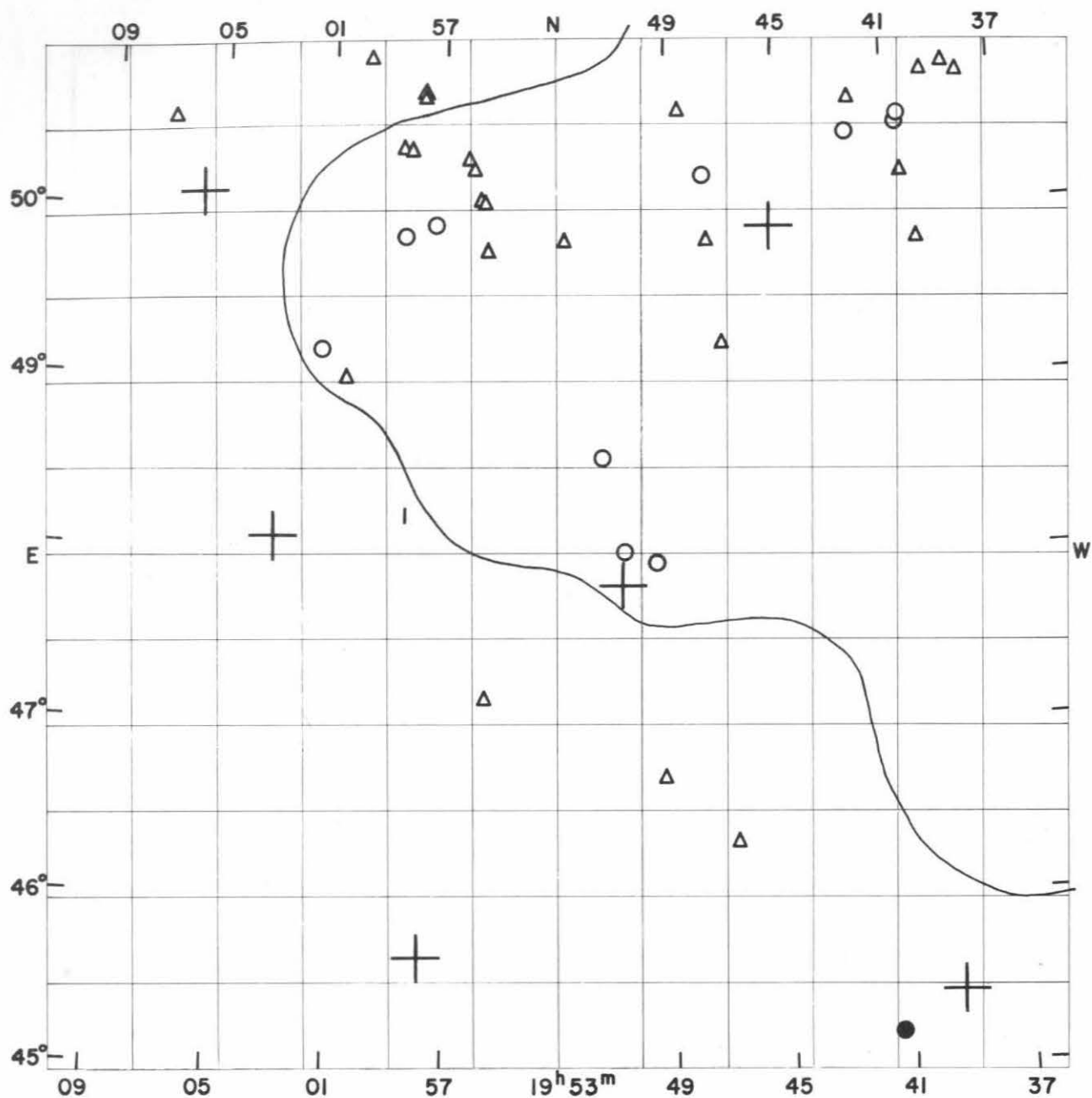
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1*
1924.4 + 4821	medium compact	90	2.5	MD	2

Average number of galaxies per cluster = 1922.5

\*) see special map on page 386

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
19	02.0	+ 45 33		15.0		double system
19	02.2	+ 50 42		15.4		
19	03.3	+ 49 34		15.1		triple system, bridges
19	04.1	+ 50 17		15.7		
19	05.6	+ 46 06		15.3		
19	05.7	+ 50 15	6759	15.2		
19	07.0	+ 50 50	6764	13.2		
19	09.0	+ 49 05		15.6		
19	10.8	+ 46 10		15.3		
19	11.7	+ 45 14		15.4		compact
19	12.2	+ 45 44		15.0		
19	12.2	+ 48 58		15.6		compact
19	15.2	+ 45 55	6783	15.4		compact
19	16.3	+ 46 44		15.5		
19	16.4	+ 50 34		15.1		
19	18.5	+ 45 21		15.7		compact
19	25.2	+ 50 01	4867*	14.3		double system
19	25.3	+ 49 39	1301*	14.7		
19	29.5	+ 46 36		15.1		
19	32.7	+ 49 08		15.4		
19	32.8	+ 49 50		15.3		compact



FIELD No. 257  
 $19^{\text{h}}53^{\text{m}} + 48^{\circ}00'$   
 Survey Plate No. 283

GC STARS

Nos.	R.A.			Decl.			m <sub>p</sub>
	h	m	s	°	'	"	
27249	19	39	17.6	+	45	24 19	5.05
27392	19	45	10.1	+	49	53 12	6.78
27531	19	50	38.7	+	47	48 07	5.70
27709	19	57	46.2	+	45	38 06	5.80
27869	20	02	59.0	+	48	05 11	5.98
27937	20	05	45.8	+	50	05 01	6.52

## CLUSTERS OF GALAXIES

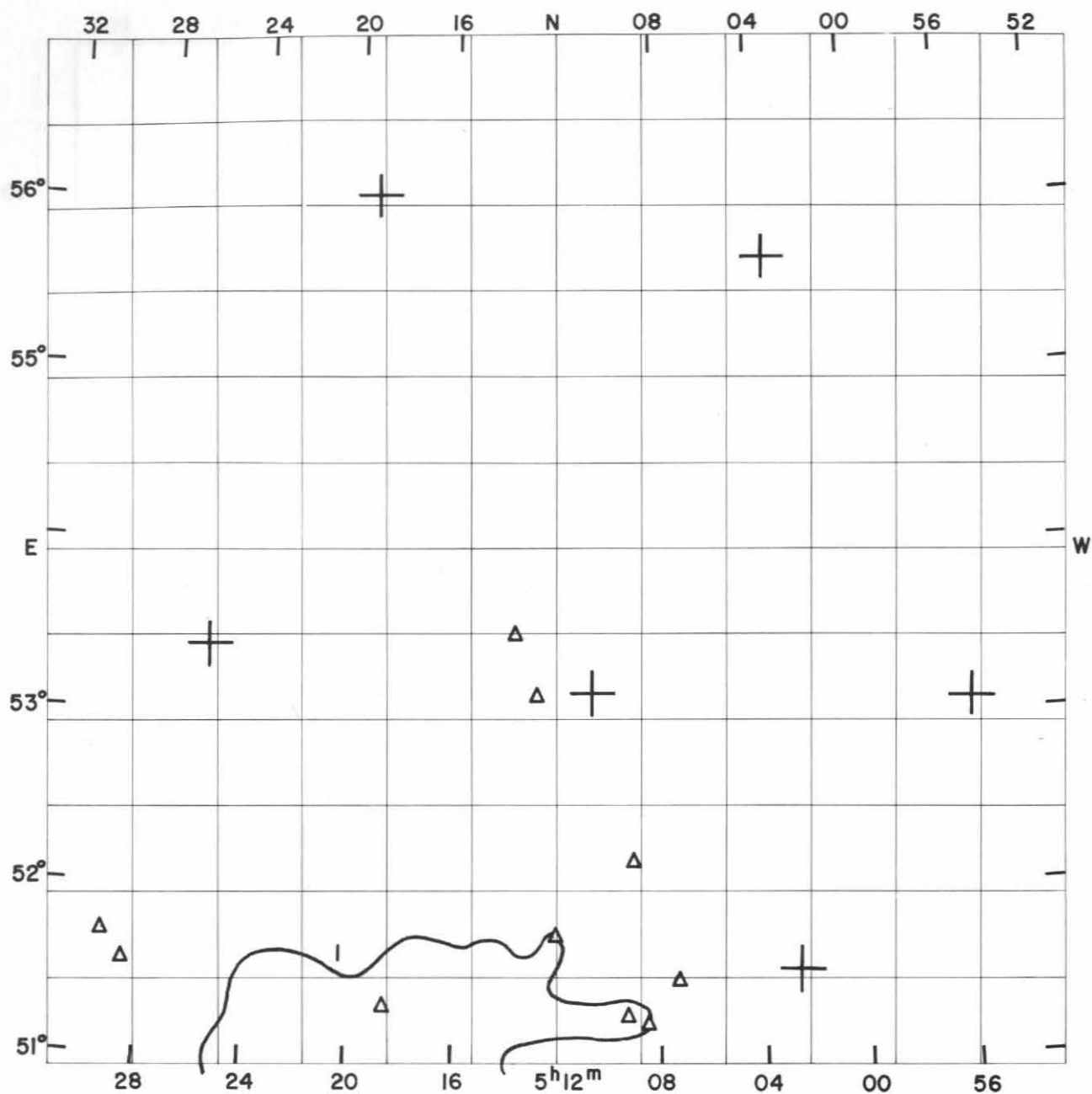
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1*

Average number of galaxies per cluster = 3755.0

\*) see special map on page 386

## GALAXIES

Position α 1950 δ				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	i				
19	38.1	+	50 46		15.5		
19	38.6	+	50 50		15.1		compact
19	39.5	+	50 47		15.3		
19	39.9	+	49 48		15.4		
19	40.3	+	50 11		15.5		
19	40.4	+	50 32		14.4		
19	40.5	+	50 30		14.9		compact
19	41.4	+	45 11		13.5		
19	42.2	+	50 38		15.7		
19	42.3	+	50 26		14.8		compact
19	46.8	+	46 18		15.5		
19	47.0	+	49 12		15.6		
19	47.5	+	49 49		15.7		
19	47.6	+	50 11		14.5		
19	48.5	+	50 35		15.5		
19	49.2	+	46 42		15.4		very compact
19	49.5	+	47 56		14.9		compact
19	50.6	+	48 00		15.0		
19	51.3	+	48 34		14.8		
19	52.6	+	49 48		15.3		double system, jets
19	55.4	+	49 45		15.7		
19	55.5	+	47 09		15.1		double nucleus
19	55.5	+	50 02		15.2		compact
19	55.6	+	50 03		15.5		diffuse
19	55.9	+	50 14		15.7		
19	56.0	+	50 17		15.2		
19	57.2	+	49 54		14.5		
19	57.6	+	50 40		15.2		
19	57.6	+	50 41		15.4		very compact
19	58.1	+	50 20		15.5		
19	58.3	+	49 50		15.0		
19	58.4	+	50 21		15.6		
19	59.7	+	50 53		15.4		
20	00.4	+	49 00		15.6		diffuse spiral
20	01.4	+	49 11		14.6		
20	06.9	+	50 32		15.3		



FIELD No. 258

$5^{\text{h}}12^{\text{m}} + 54^{\circ}00'$

Survey Plate No. 1309

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
6062	4	55	46.9	+	53	04 52	6.40
6219	5	02	45.3	+	51	32 01	4.99
6233	5	03	37.1	+	55	41 38	7.11
6383	5	10	43.3	+	53	09 25	6.16
6590	5	19	31.7	+	56	02 33	6.95
6754	5	25	50.4	+	53	23 36	7.04

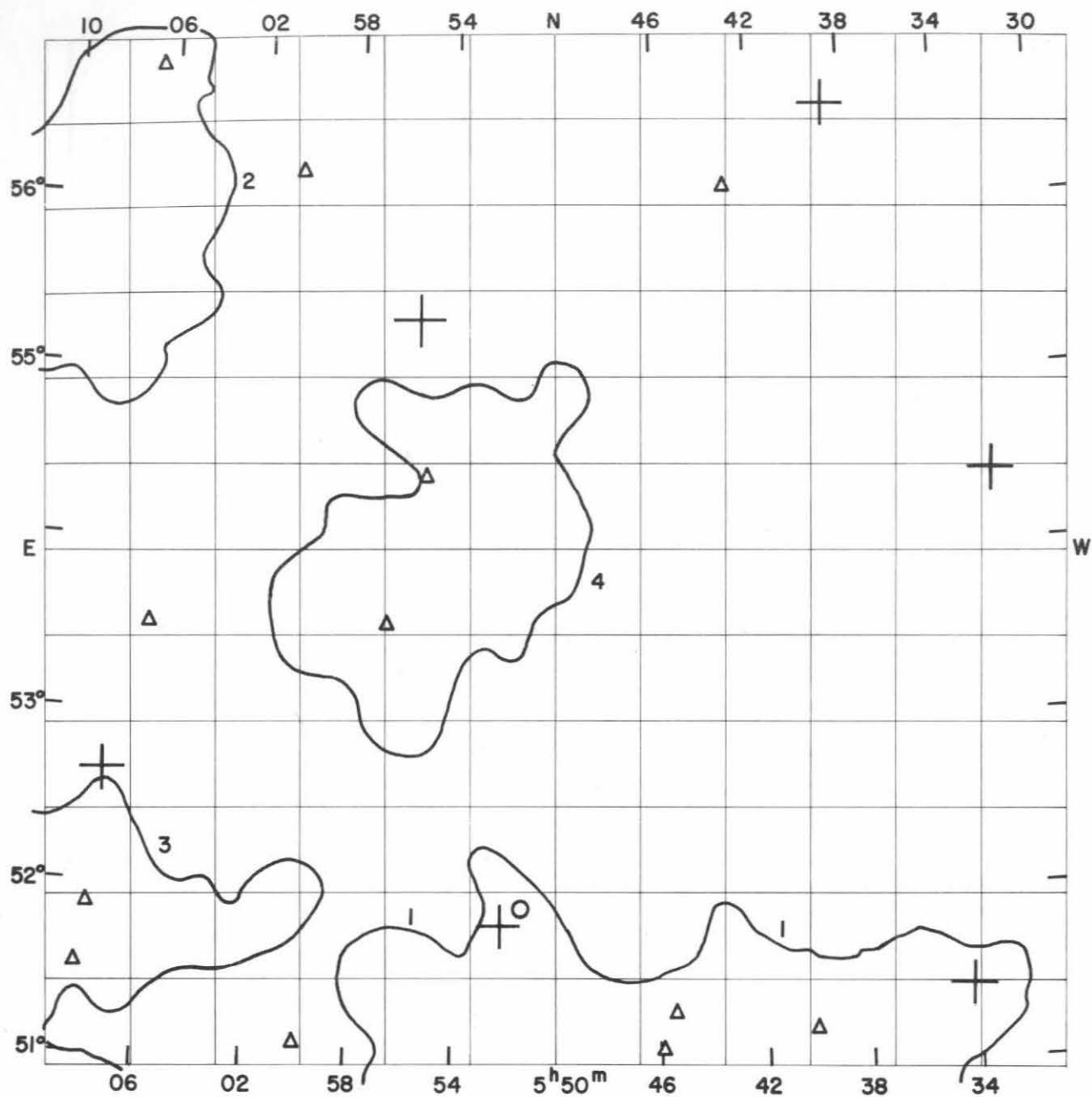


## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0517.8 + 5108	medium compact	108	8.4	Near	1
Average number of galaxies per cluster = 108.0					

## GALAXIES

Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
5	07.4	+ 51 29		15.5		diffuse
5	08.5	+ 51 15		15.2		
5	09.0	+ 52 11		15.3		
5	09.3	+ 51 18		15.4		
5	12.0	+ 51 45		15.6		
5	12.9	+ 53 09		15.6		
5	13.7	+ 53 30		15.2		
5	18.7	+ 51 21		15.6		
5	28.6	+ 51 34		15.7		diffuse spiral
5	29.4	+ 51 44		15.7		diffuse spiral



FIELD No. 259  
 $5^{\text{h}}50^{\text{m}} + 54^{\circ}00'$   
 Survey Plate No. 664

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
6921	5	32	28.8	+	54	23 53	5.96
6976	5	34	17.9	+	51	24 56	7.9
7105	5	38	47.0	+	56	33 29	6.19
7445	5	52	15.9	+	51	47 49	6.48
7527	5	55	35.5	+	55	19 09	6.48
7850	6	07	44.8	+	52	39 36	6.27

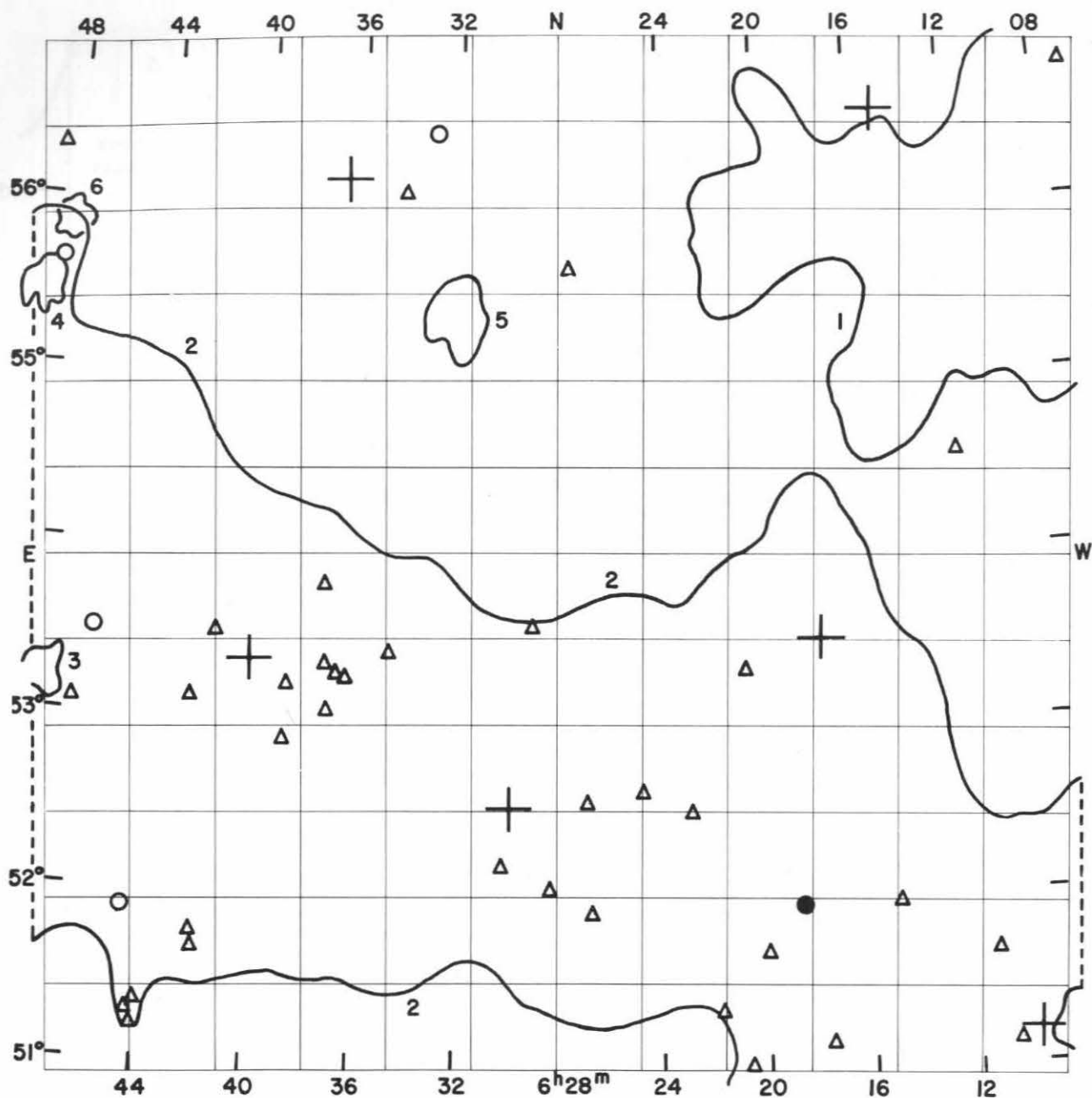
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0544.4 + 5036	open	230	17.7	Near	1
0554.9 + 5359	medium compact	168	9.7	MD	4
0612.3 + 5547	open	188	12.0	MD	2
0628.9 + 5232	open	785	28.6	Near	3

Average number of galaxies per cluster = 342.8

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α 1950	δ					
h m	o					
5 40.1	+ 51 11			15.5		
5 43.0	+ 56 05			15.3		
5 45.5	+ 51 19			15.6		
5 46.0	+ 51 05			15.7		
5 51.4	+ 51 55			14.6		
5 55.3	+ 54 25			15.2		
5 56.8	+ 53 33			15.6		
6 00.0	+ 51 06			15.3		compact
6 00.6	+ 56 09			15.4		very diffuse spiral
6 06.1	+ 53 31			15.7		
6 06.8	+ 56 46			15.5		compact
6 08.0	+ 51 53			15.5		
6 08.4	+ 51 32			15.7		



FIELD No. 260

$6^{\text{h}}28^{\text{m}} + 54^{\circ}00'$

Survey Plate No. 984

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
7907	6	09	48.7	+	51	11 15	6.28
8063	6	14	55.8	+	56	32 52	7.06
8151	6	17	42.5	+	53	28 38	5.41
8501	6	29	57.8	+	52	30 04	7.2
8689	6	36	47.7	+	56	08 47	7.09
8769	6	40	09.5	+	53	20 59	6.38

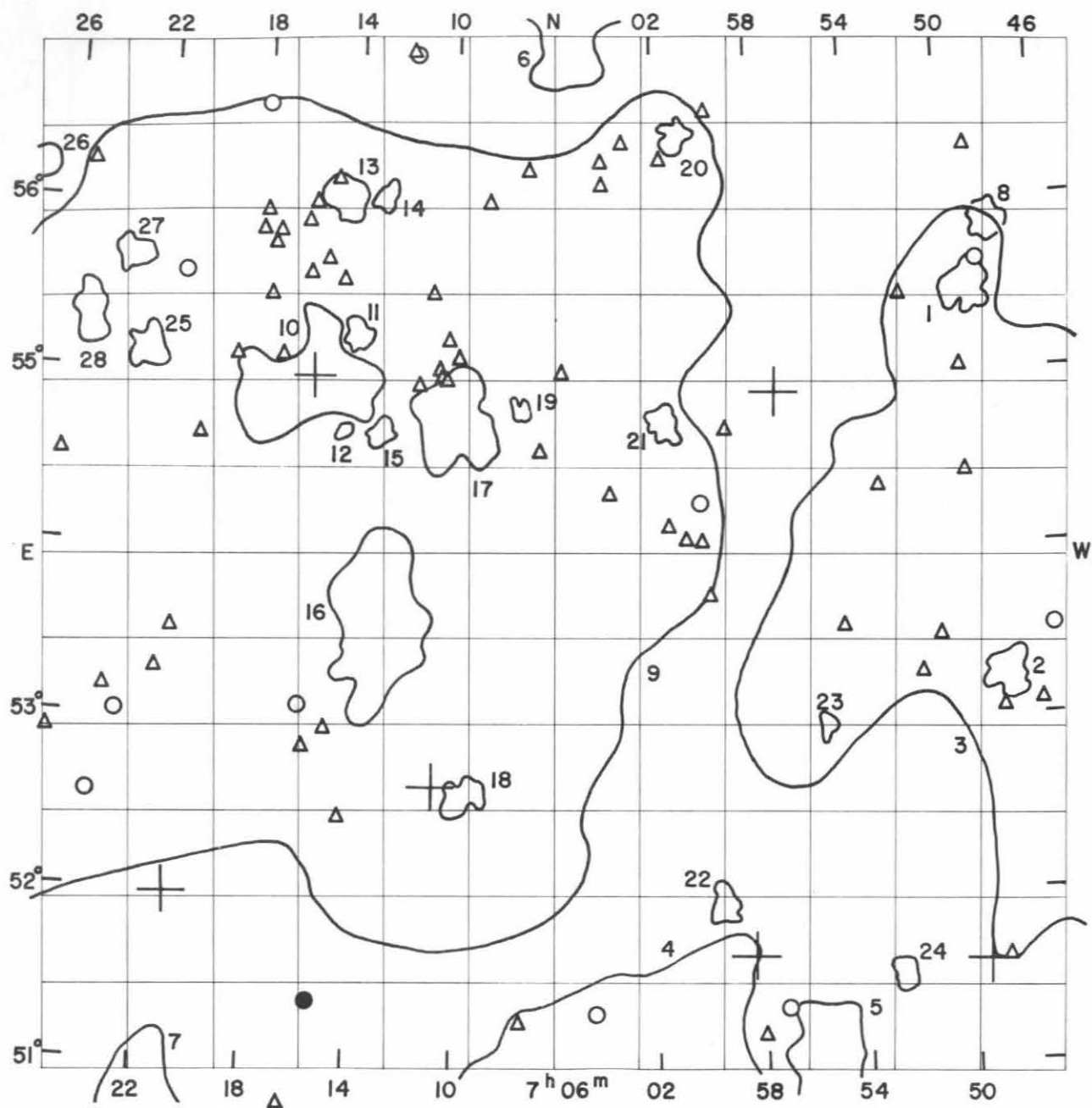
## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0612.3 + 5547	open	188	12.0	MD	1
0628.9 + 5232	open	785	28.6	Near	2
0632.1 + 5521	medium compact	68	2.1	D	5
0648.1 + 5550	compact	72	1.1	ED	6
0648.2 + 5313	compact	136	1.3	ED	3
0649.2 + 5528	medium compact	145	1.5	ED	4

Average number of galaxies per cluster = 232.3

## GALAXIES

Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o				
6	06.8	+ 56 46		15.5		compact
6	10.5	+ 51 08		15.7		
6	11.2	+ 51 40		15.6		compact
6	12.0	+ 54 33		15.2		
6	14.9	+ 51 57		15.3		
6	17.5	+ 51 08		15.7		
6	18.5	+ 51 57	2208	14.0		
6	20.0	+ 51 41		15.2		
6	20.6	+ 51 00		15.5		
6	20.6	+ 53 19		15.5		
6	21.7	+ 51 20		15.7		extremely compact, jet
6	22.8	+ 52 29		15.4		
6	24.7	+ 52 37		15.5		
6	26.7	+ 51 55		15.2		
6	26.9	+ 52 34		15.6		
6	27.6	+ 55 39		15.5		faint jet
6	28.3	+ 52 03		15.3		compact
6	29.0	+ 53 35		15.3		diffuse spiral
6	30.2	+ 52 11		15.1		
6	33.1	+ 56 25		14.8		
6	34.3	+ 56 05		15.4		double system
6	34.7	+ 53 24		15.4		compact
6	36.4	+ 53 16		15.4		
6	36.7	+ 53 17		15.6		extremely compact
6	37.1	+ 53 05		15.6		
6	37.1	+ 53 20		15.6		double system
6	37.3	+ 53 47		15.4		
6	38.7	+ 53 13		15.4		
6	38.8	+ 52 54		15.5		
6	41.6	+ 53 31		15.7		
6	42.0	+ 51 42		15.4		very compact
6	42.1	+ 51 47		15.5		
6	42.5	+ 53 08		15.4		very diffuse spiral
6	44.0	+ 51 13		15.5		
6	44.0	+ 51 21		15.6		compact
6	44.2	+ 51 18		15.7		diffuse
6	44.6	+ 51 54		14.7		
6	46.4	+ 53 31		14.8		
6	47.0	+ 53 05		15.7		triple system
6	48.6	+ 55 40		14.9		
6	48.8	+ 56 18		15.5		



FIELD No. 261  
 $7^{\text{h}}06^{\text{m}} + 54^{\circ}00'$   
 Survey Plate No. 971

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
8990	6	49	30.5	+	51	34 49	6.95
9195	6	57	08.1	+	54	55 42	6.76
9238	6	58	22.1	+	51	38 29	7.50
9563	7	10	51.4	+	52	37 56	7.16
9718	7	15	47.7	+	55	00 53	7.51
9860	7	21	03.6	+	51	59 11	5.91

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0628.9 + 5232	open	785	28.6	Near	3
0648.1 + 5550	compact	72	1.1	ED	8
0648.2 + 5313	compact	136	1.3	ED	2
0649.2 + 5528	medium compact	145	1.5	ED	1
0652.7 + 5130	compact	76	0.9	ED	24
0655.3 + 5257	compact	52	0.5	ED	23
0655.5 + 5054	medium compact	102	3.6	VD	5
0659.4 + 5156	medium compact	78	1.0	ED	22
0700.4 + 4801	medium compact	1273	36.4	Near	4
0701.0 + 5622	compact	77	0.9	ED	20
0701.6 + 5444	medium compact	70	1.0	ED	21
0704.8 + 5730	medium compact	208	7.4	D	6
0707.4 + 5449	compact	47	0.5	ED	19
0709.5 + 5234	open	86	1.1	ED	18
0710.0 + 5444	medium compact	169	2.7	D	17
0712.9 + 5334	medium compact	94	3.9	MD	16
0713.0 + 5440	compact	66	0.8	ED	15
0713.0 + 5601	compact	48	0.8	ED	14
0714.0 + 5515	compact	76	0.8	ED	11
0714.4 + 5441	compact	48	0.3	ED	12
0714.9 + 5601	medium compact	115	1.4	ED	13
0716.1 + 5456	medium compact	93	3.7	MD	10
0718.9 + 5412	medium compact	1450	28.9	Near	9
0721.2 + 5043	medium compact	86	3.4	D	7
0722.8 + 5506	medium compact	79	1.2	ED	25
0723.5 + 5539	medium compact	67	1.0	ED	27
0725.1 + 5517	medium compact	104	1.4	ED	28
0727.9 + 5608	medium compact	79	1.1	ED	26

Average number of galaxies per cluster = 206.5

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
6	46.4	+ 53 31		14.8		
6	47.0	+ 53 05		15.7		triple system
6	48.4	+ 53 03		15.5		
6	48.6	+ 55 40		14.9		
6	48.8	+ 51 37		15.6		
6	48.8	+ 56 18		15.5		
6	49.5	+ 54 25		15.1		
6	49.5	+ 55 02		15.4		compact
6	50.8	+ 53 29		15.6		
6	51.6	+ 53 16		15.7		
6	51.9	+ 55 28		15.2		
6	53.1	+ 54 22		15.6		double system
6	54.6	+ 53 33		15.7		
6	57.1	+ 51 21		14.7		
6	58.0	+ 51 12		15.7		
6	59.1	+ 54 42		15.3		
6	59.8	+ 56 33		15.3		
6	59.9	+ 53 45		15.4		
7	00.2	+ 54 03		15.5		
7	00.2	+ 54 18		15.0		

Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	s				
7	00.8	+ 54 04		15.5		
7	01.5	+ 54 09		15.1		
7	01.6	+ 56 17		15.5		
7	03.3	+ 56 22		15.7		
7	03.9	+ 54 21		15.7		
7	04.2	+ 56 08		15.6		
7	04.2	+ 56 16		15.5		
7	04.5	+ 51 20		14.8		
7	05.8	+ 55 03		15.4		
7	06.7	+ 54 35		15.6		
7	07.1	+ 56 13		15.6		
7	07.4	+ 51 16		15.1		
7	08.8	+ 56 02		15.1		
7	10.0	+ 55 07		15.3		
7	10.3	+ 55 14		15.5		
7	10.4	+ 55 00		15.4		
7	10.5	+ 55 01		15.2		
7	10.6	+ 55 04		15.6		double system
7	11.0	+ 55 30		15.5		
7	11.6	+ 54 58		15.6		
7	11.9	+ 56 54		14.3		
7	12.0	+ 56 54		15.7		
7	14.4	+ 52 27		15.3		diffuse spiral
7	14.7	+ 55 35		15.4		
7	15.0	+ 52 58		15.4		
7	15.1	+ 56 09		15.7		
7	15.4	+ 51 24		14.0		
7	15.4	+ 55 42		15.7		compact
7	16.0	+ 52 51		15.3		
7	16.0	+ 56 01		15.2		
7	16.1	+ 53 06		14.9		diffuse spiral
7	16.1	+ 55 37		15.6		compact
7	16.3	+ 55 55		15.7		diffuse spiral
7	16.4	+ 50 46		15.5		*) see footnote
7	17.1	+ 55 08		15.5		compact
7	17.4	+ 55 50		15.4		multiple system in halo
7	17.6	+ 55 46		15.2		multiple system, faint bridges
7	17.7	+ 55 28		15.6		
7	18.0	+ 55 58		15.3		
7	18.0	+ 56 35		15.0		compact
7	18.1	+ 55 51		15.7		very compact
7	19.0	+ 55 07		15.7		compact
7	20.5	+ 54 40		15.4		
7	21.3	+ 53 32		15.2		
7	21.3	+ 55 36		14.9		double system in halo
7	21.8	+ 53 17		15.6		
7	23.2	+ 53 02		14.8		triple system in halo
7	23.8	+ 53 10		15.6		
7	24.2	+ 52 34		15.0		
7	25.3	+ 56 14		15.7		double system
7	25.9	+ 52 54		15.3		very diffuse spiral
7	26.0	+ 54 32		15.2		compact

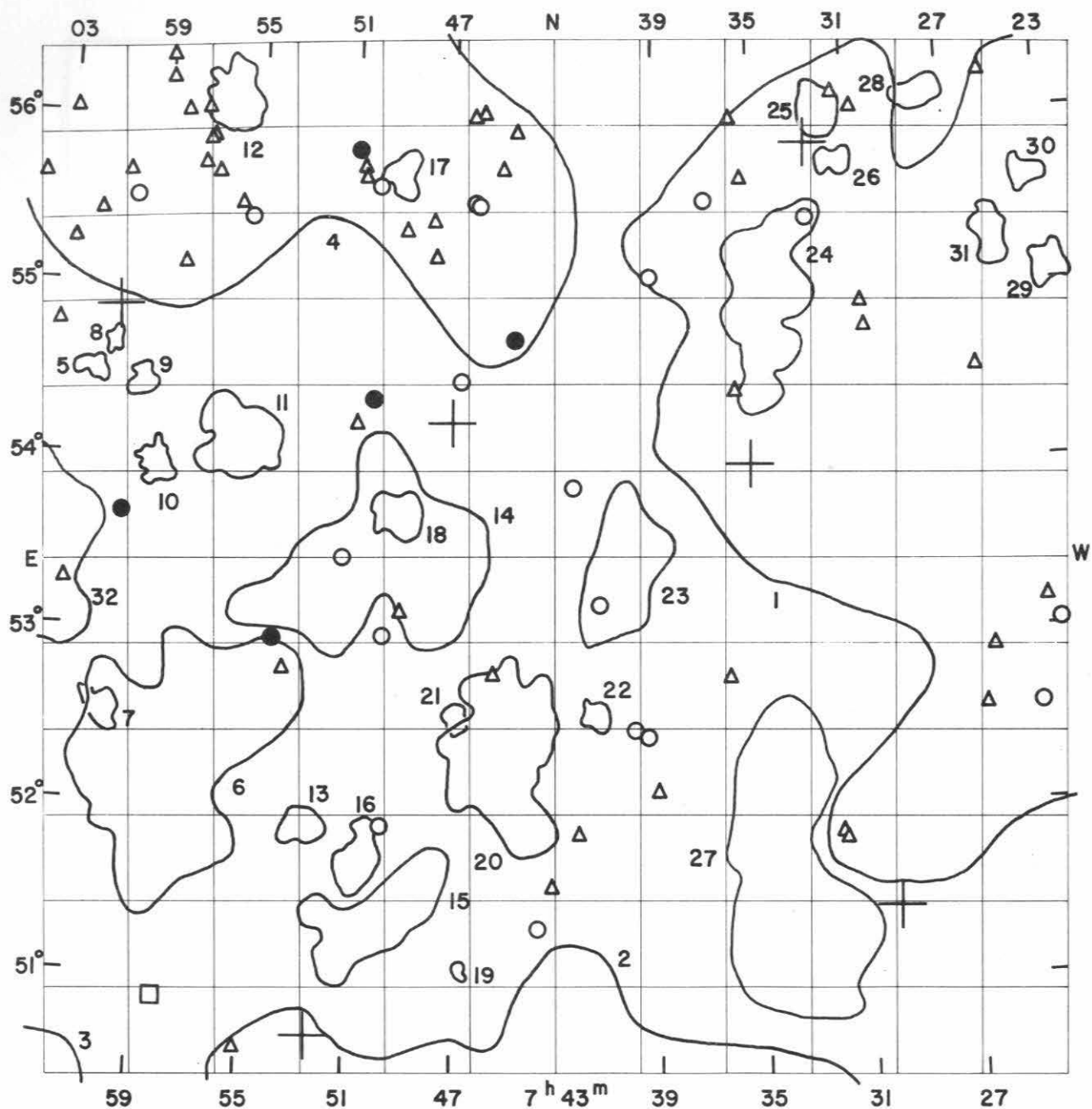
\*) An area of about one square degree near the SE-corner of this field is not covered by any of the adjacent fields. It is outlined approximately by

$$7^{\text{h}}13^{\text{m}} \leq \alpha \leq 7^{\text{h}}24^{\text{m}} \quad 50^{\circ}30' \leq \delta \leq 51^{\circ}00'$$

It contains only one galaxy and one cluster of galaxies, both of which are plotted



on the chart in their proper positions outside of the  $6^{\circ} \times 6^{\circ}$  square. The southern part of the cluster is to be found on the chart for field No. 235.



FIELD No. 262  
 $7^{\text{h}}43^{\text{m}} + 53^{\circ}30'$   
 Survey Plate No. 985

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
10096	7	30	00.9	+	51	25 23	6.52
10164	7	32	43.3	+	55	52 03	6.04
10234	7	35	15.1	+	54	00 59	6.59
10561	7	47	09.9	+	54	15 22	6.02
10699	7	52	24.0	+	50	40 34	8.5
10920	8	00	41.9	+	54	53 18	7.46

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0718.9 + 5412	medium compact	1450	28.9	Near	1
0722.8 + 5506	medium compact	79	1.2	ED	29
0723.5 + 5539	medium compact	67	1.0	ED	30
0725.1 + 5517	medium compact	104	1.4	ED	31
0727.9 + 5608	medium compact	79	1.1	ED	28
0731.4 + 5546	medium compact	70	0.9	ED	26
0732.0 + 5603	medium compact	103	1.5	ED	25
0734.0 + 5137	medium compact	89	6.3	MD	27
0734.5 + 5457	open	99	3.9	VD	24
0739.8 + 4949	medium compact	250	15.3	Near	2
0740.4 + 5323	open	60	3.4	VD	23
0741.5 + 5235	compact	63	0.9	ED	22
0745.1 + 5220	medium compact	118	4.2	MD	20
0746.7 + 5105	compact	55	0.4	ED	19
0747.0 + 5233	compact	50	0.8	ED	21
0749.2 + 5542	compact	72	1.2	VD	17
0749.3 + 5344	compact	88	1.5	ED	18
0749.9 + 5121	medium compact	109	3.3	D	15
0750.0 + 5327	open	147	6.1	D	14
0750.5 + 5143	compact	102	1.8	VD	16
0752.7 + 5155	compact	80	1.2	ED	13
0755.8 + 5408	open	89	2.6	D	11
0756.1 + 5616	open	430	16.8	Near	4
0756.4 + 5607	medium compact	93	1.9	D	12
0757.6 + 5214	open	164	6.8	MD	6
0759.0 + 5359	compact	76	1.1	ED	10
0759.6 + 5427	medium compact	64	0.9	ED	9
0800.6 + 5232	compact	78	1.1	ED	7
0800.8 + 5441	compact	52	0.7	ED	8
0801.7 + 5431	compact	89	0.9	ED	5
0803.2 + 5012	medium compact	90	3.9	D	3
0803.9 + 5327	medium compact	148	5.6	D	32

Average number of galaxies per cluster = 147.1

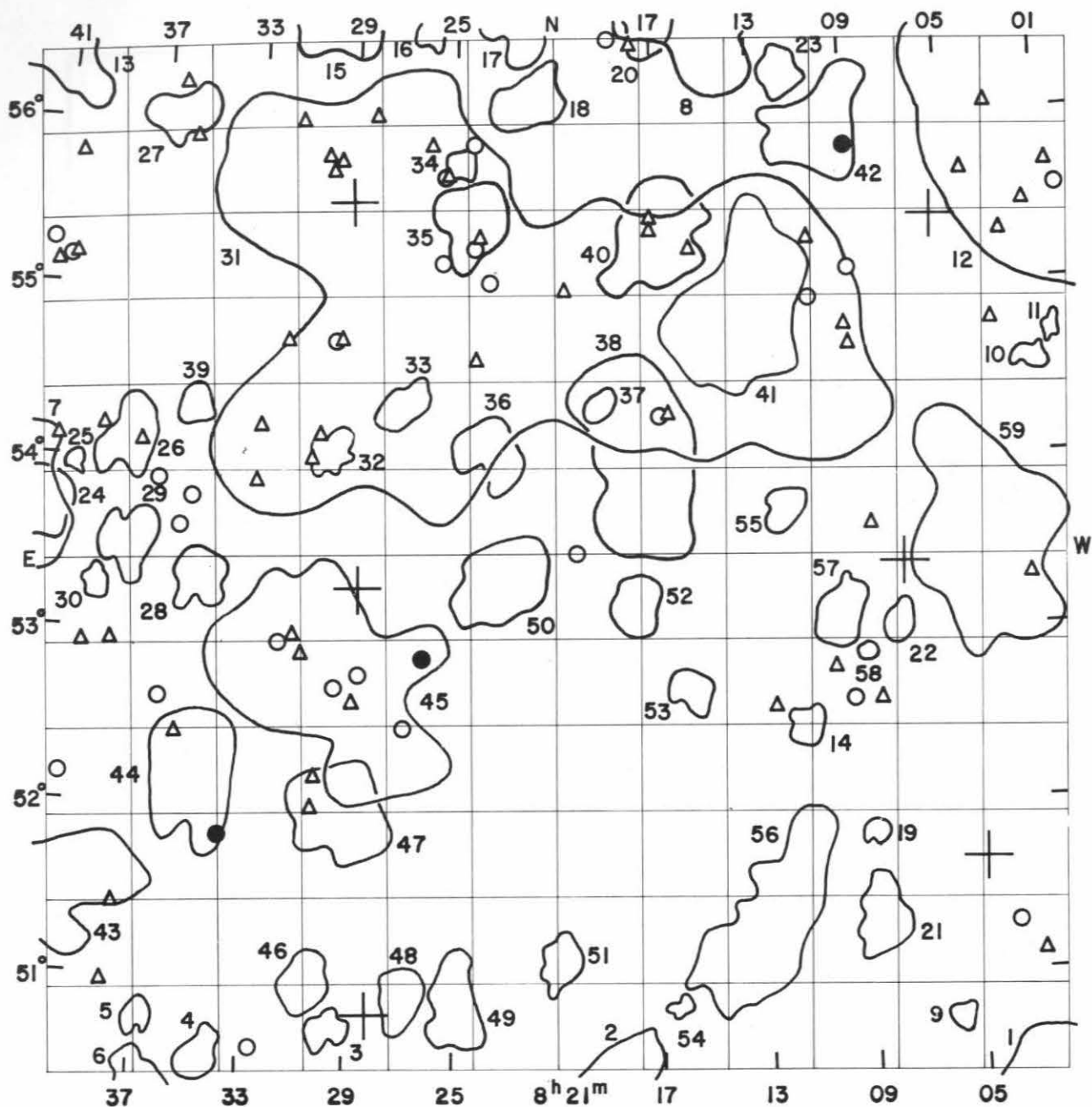
## GALAXIES

Position a 1950 $\delta$ h m o	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
7 23.2 + 53 02		14.8		triple system in halo
7 23.8 + 53 10		15.6		
7 24.2 + 52 34		15.0		
7 25.3 + 56 14		15.7		double system very diffuse spiral compact
7 25.9 + 52 54		15.3		
7 26.0 + 54 32		15.2		
7 26.3 + 52 34		15.7		
7 30.5 + 54 47		15.7		
7 30.7 + 54 55		15.2		
7 30.7 + 56 03		15.1		
7 31.5 + 56 08		15.4		
7 31.9 + 51 50		15.6		
7 32.0 + 51 52		15.1		
7 32.7 + 55 25		14.9		
7 35.4 + 55 39		15.2		double system, contact diffuse spiral
7 35.8 + 54 26		15.6		

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
7	35.8	+ 56 00		15.7		compact
7	36.1	+ 52 46		15.3		
7	36.9	+ 55 32		14.2		multiple system
7	39.0	+ 52 07		15.7		
7	39.1	+ 55 05		15.0		double system
7	39.4	+ 52 27	2426	14.4		
7	39.9	+ 52 29	2429	14.7		double system
7	41.4	+ 53 12	2431	14.3		
7	42.1	+ 51 54		15.7		extremely diffuse
7	42.3	+ 53 54		14.9		
7	43.1	+ 51 35		15.5		
7	43.7	+ 51 20		14.8		
7	44.6	+ 55 56		15.2		
7	44.7	+ 54 44	2446	13.9		
7	45.1	+ 55 43		15.3		
7	45.5	+ 52 48		15.1		very compact
7	45.9	+ 56 02		15.4		
7	46.1	+ 55 30		14.1		
7	46.2	+ 55 32		14.9		
7	46.3	+ 56 01		15.1		
7	46.8	+ 54 29		14.8		
7	47.8	+ 55 13		15.3		very diffuse
7	48.0	+ 55 25		15.7		compact
7	49.0	+ 55 21		15.5		
7	49.2	+ 53 10		15.2		
7	49.8	+ 51 56		15.0		
7	49.8	+ 53 01		14.6		
7	50.1	+ 55 37	2456	14.3		
7	50.3	+ 54 23		13.8		
7	50.7	+ 55 40	2457	15.6		
7	50.8	+ 55 43		15.7		diffuse
7	50.9	+ 54 15		15.1		
7	51.0	+ 55 50		13.6		
7	51.4	+ 53 28		14.4		
7	53.7	+ 52 50		15.4		compact
7	54.1	+ 53 00	2474+2475	13.9	+ 5019	double system in halo
7	55.0	+ 50 37		15.3		
7	55.4	+ 55 25		14.9		
7	56.0	+ 55 30		15.4		very compact
7	56.9	+ 55 41		15.2		
7	57.2	+ 55 53		15.5		
7	57.3	+ 55 52		15.4		
7	57.5	+ 55 43		15.1		compact
7	57.5	+ 56 03		15.6		
7	58.1	+ 55 09		15.5		double system
7	58.2	+ 50 54	2500	12.3	+ 470	$m_H = 12.6$ S
7	58.3	+ 56 02		15.6		
7	59.0	+ 56 13		15.5		
7	59.0	+ 56 21		15.6		
8	00.2	+ 53 42	2505	14.0		
8	00.2	+ 55 32		15.0		
8	00.6	+ 55 40		15.4		
8	01.7	+ 55 27		15.7		
8	02.3	+ 53 18		15.5		
8	02.7	+ 55 17		15.4		
8	03.0	+ 56 02		15.6		compact
8	03.3	+ 54 46		15.7		
8	04.2	+ 55 39		15.5		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2475	-	-	-	-	-	E3	-	-
2500	-	-	12.35	Sc	12.0	Sc	12.13	Sc+



FIELD No. 263

$8^h 21^m + 53^\circ 30'$

Survey Plate No. 679

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
11018	8	04	42.3	+	51	39 10	4.87
11038	8	05	33.2	+	55	24 12	6.89
11087	8	07	20.1	+	53	23 42	6.81
11645	8	28	17.0	+	50	47 28	7.40
11665	8	28	49.0	+	53	17 09	6.53
11677	8	29	15.1	+	55	31 33	7.68

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0756.1 + 5616	open	430	16.8	Near	12
0800.8 + 5441	compact	52	0.7	ED	11
0801.7 + 5431	compact	89	0.9	ED	10
0803.2 + 5012	medium compact	90	3.9	D	1
0803.9 + 5327	medium compact	148	5.6	D	59
0805.9 + 5044	medium compact	49	0.8	ED	9
0807.6 + 5300	medium compact	63	1.2	VD	22
0808.6 + 5120	medium compact	63	1.9	VD	21
0808.8 + 5150	compact	53	0.8	ED	19
0808.8 + 5252	compact	47	0.6	ED	58
0809.8 + 5305	medium compact	132	1.8	ED	57
0810.0 + 5554	medium compact	95	3.1	D	42
0811.3 + 5227	compact	64	1.2	ED	14
0811.4 + 5615	medium compact	88	1.4	ED	23
0811.9 + 5344	medium compact	68	1.2	ED	55
0813.0 + 5118	medium compact	118	4.3	MD	56
0813.5 + 5449	medium compact	210	4.6	D	41
0814.8 + 5648	medium compact	102	5.6	Near	8
0815.7 + 5240	compact	83	1.4	ED	53
0816.4 + 5050	compact	48	0.7	ED	54
0816.7 + 5519	medium compact	88	3.2	VD	40
0817.0 + 5635	medium compact	166	2.0	ED	20
0817.6 + 5401	open	105	4.8	D	38
0817.8 + 5311	medium compact	106	1.7	ED	52
0818.9 + 5021	open	65	2.9	VD	2
0819.4 + 5420	medium compact	85	0.9	ED	37
0820.8 + 5106	compact	120	1.5	ED	51
0822.0 + 5605	medium compact	79	2.0	VD	18
0822.4 + 5453	open	320	14.5	Near	31
0822.7 + 5635	open	134	2.3	VD	17
0823.2 + 5320	medium compact	116	2.9	D	50
0823.7 + 5404	medium compact	149	1.9	VD	36
0824.4 + 5525	open	99	2.3	D	35
0824.8 + 5050	medium compact	73	2.2	VD	49
0824.9 + 5544	compact	88	1.0	ED	34
0826.1 + 5630	compact	138	1.0	ED	16
0826.8 + 5055	medium compact	109	1.6	ED	48
0827.1 + 5421	medium compact	92	1.5	VD	33
0829.2 + 5159	medium compact	95	3.1	D	47
0829.6 + 5245	medium compact	128	6.5	Near	45
0829.7 + 5042	medium compact	64	1.2	VD	3
0830.0 + 5405	medium compact	83	1.3	VD	32
0830.1 + 5634	medium compact	95	2.6	VD	15
0830.5 + 5058	compact	149	1.7	VD	46
0834.4 + 5031	medium compact	116	1.4	ED	4
0835.0 + 5208	medium compact	91	3.5	VD	44
0835.0 + 5320	medium compact	125	1.7	ED	28
0835.5 + 5418	medium compact	80	1.1	ED	39
0836.4 + 5017	medium compact	105	2.2	VD	6
0836.5 + 5600	medium compact	120	1.9	ED	27
0836.7 + 5045	compact	59	0.9	ED	5
0838.0 + 5331	medium compact	134	1.8	ED	29
0838.1 + 5406	medium compact	207	2.0	ED	26
0839.1 + 5316	compact	62	0.8	ED	30
0840.1 + 5128	medium compact	99	4.4	MD	43
0840.2 + 5359	compact	59	0.6	ED	25
0841.5 + 5619	medium compact	190	2.4	ED	13

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0841.9 + 5341	medium compact	191	2.2	VD	24
0855.0 + 5248	open	295	18.0	Near	7

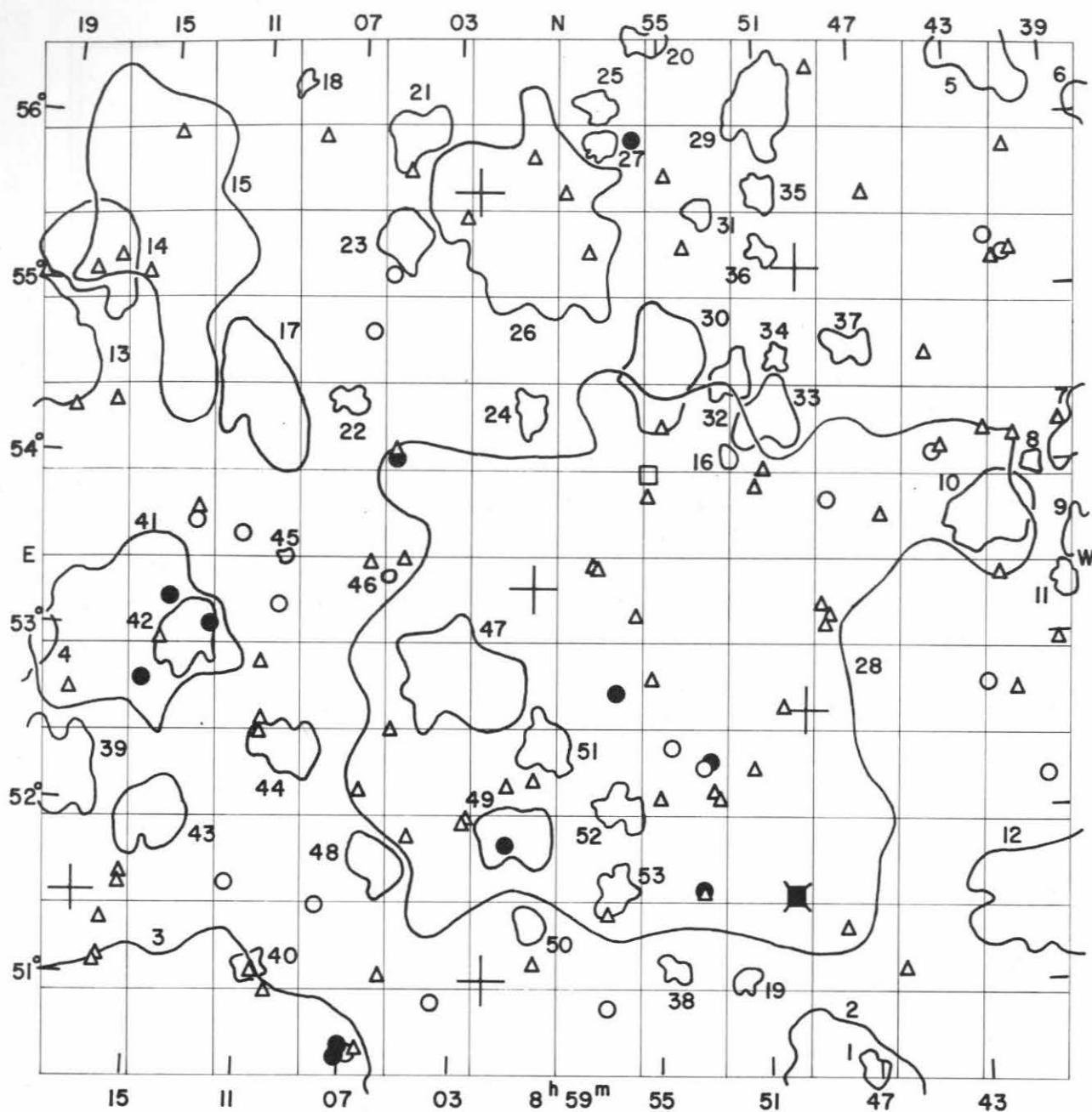
Average number of galaxies per cluster = 114.8

### GALAXIES

Position a 1950 $\delta$			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o ' "				
8	00.2	+ 55 32		15.0		
8	00.6	+ 55 40		15.4		
8	01.7	+ 55 27		15.7		
8	02.3	+ 53 18		15.5		
8	02.6	+ 51 07		15.5		
8	02.7	+ 55 17		15.4		
8	03.0	+ 56 02		15.6		compact
8	03.3	+ 54 46		15.7		
8	03.5	+ 51 17	2518=2519	14.2		
8	04.2	+ 55 39		15.5		
8	08.3	+ 52 37		15.7		
8	08.5	+ 53 38		15.5		
8	09.0	+ 55 07		14.2		
8	09.0	+ 55 49	2534	13.8		
8	09.1	+ 54 40		15.6		
8	09.2	+ 54 46		15.2		compact
8	09.4	+ 52 37		15.0		
8	10.1	+ 52 48		15.4		
8	10.6	+ 54 56		14.4		
8	10.7	+ 55 17		15.3		
8	12.5	+ 52 35		15.4		diffuse
8	15.5	+ 55 15		15.5		
8	16.5	+ 54 17		15.4		
8	16.9	+ 54 16		14.8		
8	17.0	+ 55 25		15.6		
8	17.1	+ 55 20		15.3		very compact
8	17.9	+ 56 26		15.6		
8	18.8	+ 56 28		14.9		
8	20.2	+ 53 30		15.0		
8	20.6	+ 55 00		15.1		diffuse spiral
8	23.7	+ 55 04		14.9		
8	24.0	+ 55 18		15.1		
8	24.2	+ 54 36		15.3		
8	24.2	+ 55 15		14.8		
8	24.3	+ 55 52		14.3		extremely compact
8	25.3	+ 55 40		15.2		
8	25.4	+ 55 40		14.9		
8	25.6	+ 55 10		14.8		
8	26.0	+ 55 50		15.3		
8	26.2	+ 52 52		13.9		
8	27.0	+ 52 28		14.5		
8	28.3	+ 56 01		15.5		star superposed
8	28.7	+ 52 46		14.7		compact
8	29.0	+ 52 37		15.3		
8	29.6	+ 52 42		14.4		
8	29.6	+ 54 43		15.5		
8	29.8	+ 55 45		15.7		
8	29.9	+ 54 42		14.9		



Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
8	30.1	+ 55 42		15.4		
8	30.3	+ 55 47		15.7		
8	30.4	+ 52 11		15.4		
8	30.4	+ 54 10		15.6		
8	30.5	+ 52 00		15.5		
8	30.8	+ 54 01		15.7		diffuse
8	31.0	+ 52 54	2600	15.1		
8	31.4	+ 53 00	2602	15.4		
8	31.4	+ 55 59		15.2		
8	31.8	+ 54 42		15.6		
8	31.9	+ 52 58	2606	15.0		
8	32.5	+ 50 36		15.0		
8	32.8	+ 54 13		15.5		
8	32.9	+ 53 54		15.3		
8	34.0	+ 51 50		14.0		
8	35.5	+ 53 47		14.6		
8	35.8	+ 52 25		15.6		compact
8	35.9	+ 53 38		14.1		
8	35.9	+ 55 53		15.7		compact
8	36.4	+ 52 38		14.5		
8	36.4	+ 56 12		15.1		
8	36.8	+ 53 54		15.0		compact
8	37.5	+ 54 06		15.2		
8	37.9	+ 51 26		15.1		diffuse spiral
8	38.2	+ 50 58		15.7		
8	38.5	+ 52 56		15.1		
8	39.0	+ 54 12		15.7		
8	39.6	+ 52 56		15.6		
8	40.2	+ 52 11		14.9		
8	40.6	+ 55 11		15.4		compact
8	40.6	+ 55 48		15.6		very compact
8	40.8	+ 55 11		14.6		
8	40.9	+ 54 07		15.2		
8	41.3	+ 55 09		15.3		compact
8	41.6	+ 55 17		15.0		double nebula



FIELD No. 264

8<sup>h</sup> 59<sup>m</sup> + 53° 30'

Survey Plate No. 982

GC STARS

Nos.	R.A.			Decl.	m <sub>p</sub>
	h	m	s		
12238	8	49	24.0	+ 55 08 30	7.35
12241	8	49	28.8	+ 52 34 43	6.99
12498	8	59	56.0	+ 53 18 24	7.08
12534	9	01	48.3	+ 51 01 28	6.73
12543	9	02	15.4	+ 55 35 25	7.64
12865	9	17	16.2	+ 51 28 35	6.12

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0836.5 + 5600	medium compact	120	1.9	ED	6
0838.0 + 5331	medium compact	134	1.8	ED	9
0838.1 + 5406	medium compact	207	2.0	ED	7
0839.1 + 5316	compact	62	0.8	ED	11
0840.1 + 5128	medium compact	99	4.4	MD	12
0840.2 + 5359	compact	59	0.6	ED	8
0841.5 + 5619	medium compact	190	2.4	ED	5
0841.9 + 5341	medium compact	191	2.2	VD	10
0847.2 + 5029	medium compact	53	0.9	ED	1
0847.4 + 5440	compact	79	1.2	ED	37
0847.8 + 5020	open	102	4.4	VD	2
0850.4 + 5437	compact	54	0.7	ED	34
0850.8 + 5416	medium compact	149	1.9	ED	33
0850.8 + 5605	compact	188	2.5	ED	29
0850.9 + 5514	compact	63	0.8	ED	36
0850.9 + 5535	medium compact	88	1.1	ED	35
0851.8 + 5101	compact	68	0.8	ED	19
0852.1 + 5430	compact	121	1.3	ED	32
0852.2 + 5403	compact	49	0.6	ED	16
0853.4 + 5528	medium compact	48	0.9	ED	31
0854.5 + 5106	medium compact	59	0.8	ED	38
0854.8 + 5434	medium compact	115	3.0	MD	30
0855.0 + 5248	open	295	18.0	Near	28
0855.5 + 5628	medium compact	73	1.0	ED	20
0856.6 + 5202	medium compact	113	1.4	ED	52
0856.7 + 5133	compact	86	1.3	ED	53
0857.4 + 5552	medium compact	93	1.0	VD	27
0857.5 + 5606	compact	71	1.1	ED	25
0859.4 + 5224	compact	180	1.6	ED	51
0900.0 + 5121	medium compact	61	1.0	ED	50
0900.0 + 5419	compact	75	1.1	ED	24
0900.2 + 5525	open	120	5.9	MD	26
0900.6 + 5153	medium compact	99	2.1	VD	49
0902.7 + 5246	medium compact	132	3.5	D	47
0904.9 + 5555	medium compact	120	1.8	ED	21
0905.3 + 5519	medium compact	93	1.7	VD	23
0905.6 + 5322	compact	55	0.3	ED	46
0905.9 + 5143	compact	145	1.6	ED	48
0907.2 + 5422	medium compact	52	0.9	ED	22
0909.5 + 5221	medium compact	121	2.0	ED	44
0909.7 + 5612	compact	52	0.6	ED	18
0909.8 + 5328	compact	35	0.4	ED	45
0910.5 + 5105	compact	60	0.9	ED	40
0910.7 + 5421	medium compact	194	3.3	VD	17
0913.4 + 5258	medium compact	198	2.0	ED	42
0914.5 + 5156	compact	225	2.2	ED	43
0915.0 + 5521	medium compact	172	6.7	MD	15
0915.6 + 5258	open	138	5.6	MD	41
0916.7 + 4952	open	199	15.7	Near	3
0917.9 + 5508	compact	326	3.1	VD	14
0918.1 + 5209	compact	301	2.8	ED	39
0919.2 + 5431	medium compact	309	3.1	VD	13
0919.5 + 5251	medium compact	122	2.0	ED	4

Average number of galaxies per cluster = 124.8

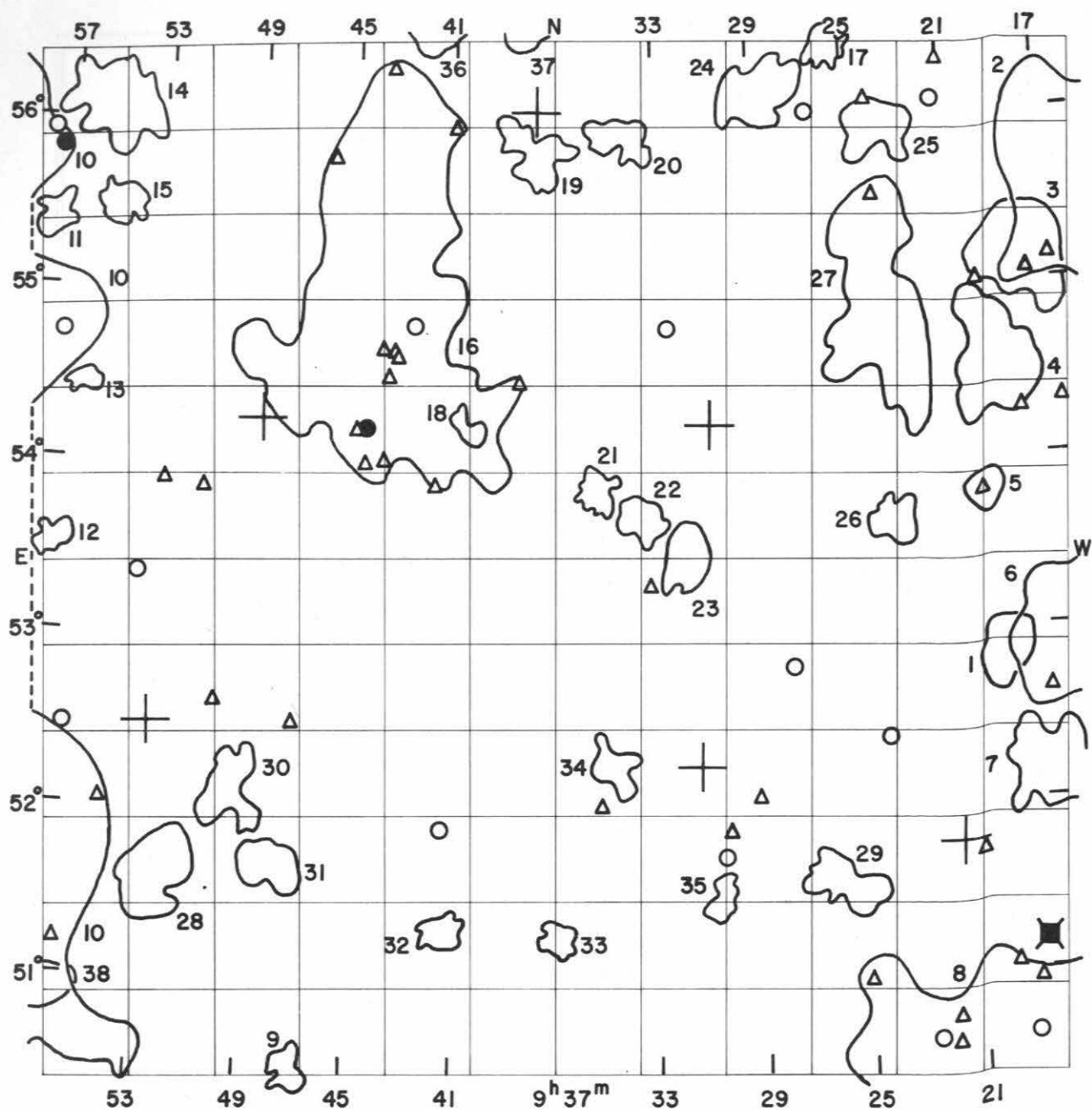
## GALAXIES

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	i				
8	39.0	+	54 12		15.7		
8	39.6	+	52 56		15.6		
8	40.2	+	52 11		14.9		
8	40.6	+	55 11		15.4		compact
8	40.6	+	55 48		15.6		very compact
8	40.8	+	55 11		14.6		
8	40.9	+	54 07		15.2		
8	41.2	+	52 40		15.7		
8	41.3	+	55 09		15.3		compact
8	41.6	+	55 17		15.0		double nebula
8	41.7	+	53 20		15.6		quadruple system
8	42.0	+	54 10		15.1		double system, jet
8	42.3	+	52 43		14.9		
8	43.8	+	54 05		15.7		
8	44.1	+	54 03	2656	15.0		double system in halo
8	44.2	+	54 37		15.7		
8	45.9	+	51 04		15.3		
8	46.2	+	53 42		15.5		compact
8	46.5	+	55 33		15.2		double system
8	48.0	+	51 19		15.5		
8	48.3	+	53 48	2675	14.4		
8	48.4	+	53 07		15.3		double system
8	48.5	+	53 04		15.5		
8	48.6	+	56 17		15.6		triple system
8	48.7	+	53 11		15.6		
8	49.9	+	51 31	2681	10.4	+ 720	$m_H = 11.3$ Sa
8	50.2	+	52 35		15.2		compact
8	50.9	+	53 58		15.7		
8	51.1	+	53 53		15.5		
8	51.4	+	52 15		15.7		
8	52.7	+	52 05		15.2		
8	53.0	+	52 07		15.4		compact
8	53.1	+	52 18		13.6		
8	53.3	+	51 02	2694	15.2	+ 5123	very compact
8	53.3	+	51 03	2693	13.1	+ 4956	$m_H = 12.9$ E
8	53.3	+	52 16	2692	14.1		
8	54.0	+	55 15		15.4		compact
8	54.5	+	52 23		14.9		
8	54.7	+	55 40		15.6		disrupted multiple system
8	54.9	+	54 14		15.6		
8	55.0	+	52 05		15.3		
8	55.3	+	52 46		15.7		
8	55.3	+	53 57	2701	12.3		$m_H = 12.5$ S
8	55.4	+	53 49		15.7		
8	55.9	+	53 07		15.6		double system
8	56.0	+	55 53	2710	13.8		
8	56.7	+	52 42		13.7		
8	57.0	+	51 25		15.1		
8	57.1	+	50 53		15.0		faint companion
8	57.4	+	53 25		15.4		
8	57.5	+	53 25		15.5		
8	57.8	+	55 14		15.4		
8	58.6	+	55 35		15.7		
8	59.9	+	51 07		15.6		
8	59.9	+	52 11		15.3		
9	00.0	+	55 47		15.5		compact
9	01.0	+	51 50		13.6		

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	s				
9	01.0	+ 52 09		15.5		
9	02.4	+ 51 57	2739	15.5		
9	02.5	+ 51 56	2740	15.1		
9	02.7	+ 55 25		15.7		
9	03.6	+ 50 55		14.2		
9	04.7	+ 51 51		15.3		
9	05.0	+ 53 27		15.4		compact
9	05.0	+ 55 42		15.6		
9	05.4	+ 52 28		15.7		
9	05.4	+ 54 03	2756	13.2		
9	05.4	+ 54 06		15.5		
9	05.6	+ 51 03		15.7		
9	05.7	+ 55 06		14.8		
9	06.3	+ 53 26		15.7		
9	06.4	+ 50 38	2762	15.7		
9	06.4	+ 54 46		14.5		
9	06.5	+ 52 07		15.5		compact
9	06.7	+ 50 37	2767	14.4		
9	07.0	+ 50 39	2769	13.8		
9	07.1	+ 50 36	2771	14.0		
9	08.0	+ 51 28		14.5		
9	08.5	+ 55 53		15.5		
9	09.8	+ 50 57		15.7		
9	09.9	+ 53 11		14.2		
9	10.3	+ 51 03		15.6		very compact
9	10.3	+ 52 30		15.1		
9	10.4	+ 52 26		15.5		
9	10.4	+ 52 50		15.4		
9	11.3	+ 53 35		14.8		
9	11.4	+ 51 34		14.6		
9	12.5	+ 53 03		14.0		
9	13.1	+ 53 43		15.5		
9	13.2	+ 53 39		14.7		
9	14.1	+ 53 12		13.4		
9	14.4	+ 52 56		15.3		
9	14.6	+ 55 52		15.7		
9	15.0	+ 52 43	2800	14.0		
9	15.4	+ 51 35		15.2		
9	15.5	+ 51 32		15.3		
9	15.6	+ 55 03		15.4		
9	16.0	+ 51 19		15.4		
9	16.1	+ 51 05		15.7		
9	16.2	+ 51 04		15.7		
9	16.6	+ 54 19		15.6		
9	16.8	+ 55 09		15.7		compact
9	17.8	+ 52 39		15.6		
9	17.8	+ 55 04		15.3		compact
9	18.2	+ 54 16		15.6		
9	19.9	+ 55 02		15.3		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2681	11.1	Sa	11.17	Sa	11.0	Sa	11.33	Sa
2693	12.9	E	13.48	E2	13.3	E2	-	-
2694	-	-	15.46	E0	15.5	E0	-	-



FIELD No. 265  
 $9^{\text{h}}37^{\text{m}} + 53^{\circ}30'$   
 Survey Plate No. 681

#### GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
12962	9	21	28.3	+ 51 47 23	6.37
13189	9	30	49.7	+ 54 16 10	7.16
13212	9	31	24.7	+ 52 16 30	4.65
13349	9	37	46.1	+ 56 05 40	6.67
13559	9	48	43.1	+ 54 17 56	4.54
13652	9	52	47.3	+ 52 30 24	6.79

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0915.0 + 5521	medium compact	172	6.7	MD	2
0915.6 + 5258	open	138	5.6	MD	6
0916.7 + 4952	open	199	15.7	Near	8
0917.9 + 5508	compact	326	3.1	VD	3
0918.1 + 5209	compact	301	2.8	ED	7
0919.2 + 5431	medium compact	309	3.1	VD	4
0919.5 + 5251	medium compact	122	2.0	ED	1
0920.0 + 5348	medium compact	67	1.2	ED	5
0923.6 + 5340	medium compact	78	1.4	ED	26
0923.7 + 5453	medium compact	292	4.5	D	27
0923.7 + 5557	medium compact	147	2.0	ED	25
0925.7 + 5626	compact	100	1.2	ED	17
0926.0 + 5135	medium compact	172	1.8	ED	29
0928.6 + 5610	medium compact	181	2.2	VD	24
0930.8 + 5130	medium compact	70	1.1	ED	35
0931.9 + 5329	compact	106	1.8	ED	23
0933.6 + 5343	compact	107	1.5	ED	22
0934.4 + 5556	medium compact	95	1.5	ED	20
0934.8 + 5216	medium compact	88	1.4	ED	34
0935.4 + 5353	medium compact	68	1.2	VD	21
0937.0 + 5117	medium compact	82	1.1	ED	33
0937.8 + 5550	medium compact	140	1.8	ED	19
0938.1 + 5645	medium compact	174	2.7	VD	37
0940.5 + 5415	compact	73	0.9	ED	18
0941.4 + 5120	compact	79	1.2	ED	32
0941.9 + 5653	compact	149	3.8	D	36
0943.7 + 5454	medium compact	187	8.8	Near	16
0947.0 + 5030	medium compact	92	1.2	ED	9
0948.0 + 5142	medium compact	111	1.7	ED	31
0949.6 + 5207	medium compact	160	2.0	ED	30
0952.3 + 5136	medium compact	189	2.5	ED	28
0955.0 + 5530	medium compact	86	1.4	VD	15
0955.4 + 5605	open	125	2.8	VD	14
0956.0 + 5429	compact	80	0.9	ED	13
0956.9 + 5332	medium compact	82	1.1	ED	12
0957.7 + 5059	medium compact	111	3.2	D	38
0957.7 + 5525	medium compact	93	1.3	ED	11
1012.8 + 5337	open	685	28.3	Near	10

Average number of galaxies per cluster = 153.6

## GALAXIES

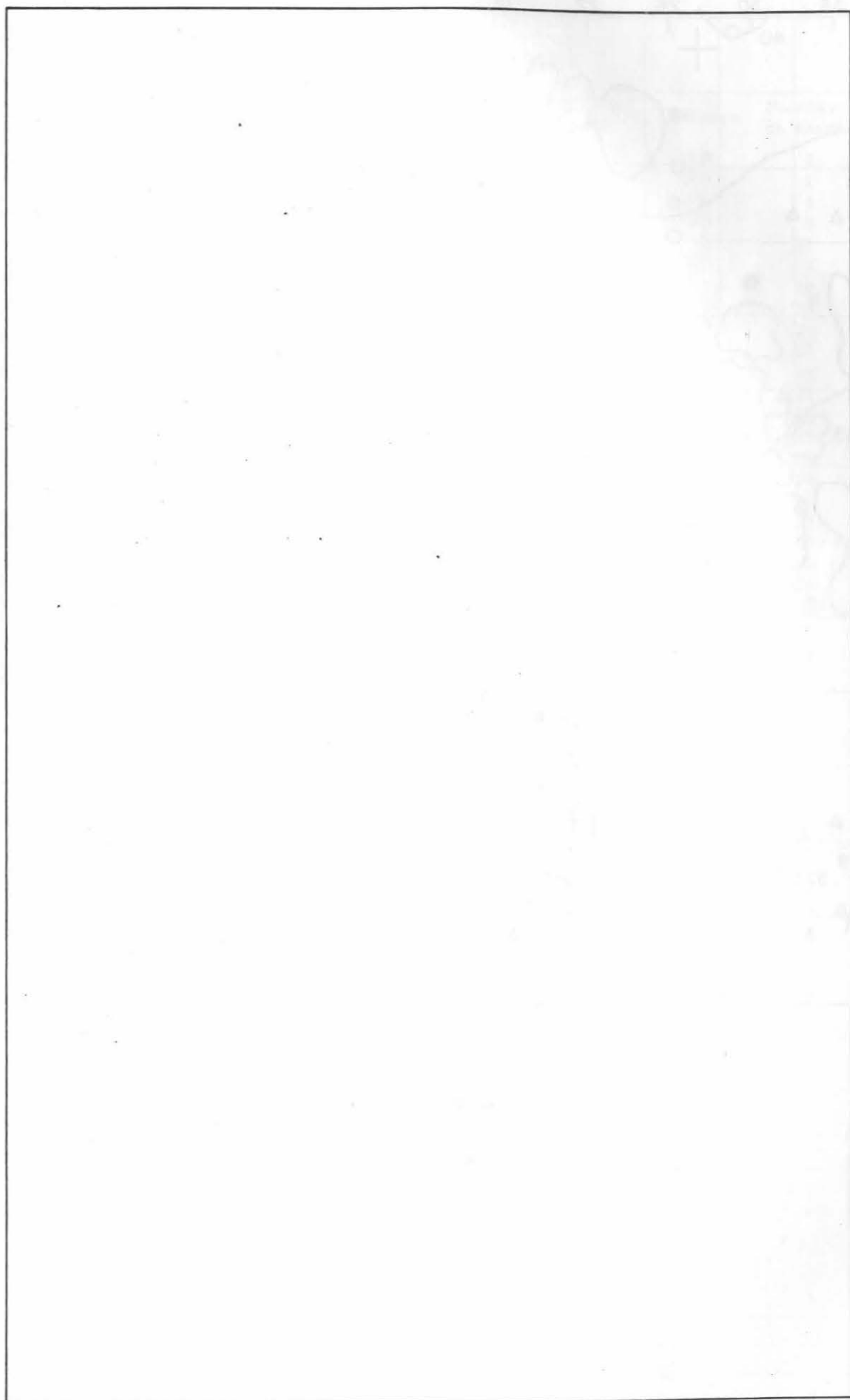
Position α 1950 δ			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	s				
9	16.6	+ 54 19		15.6		
9	16.8	+ 55 09		15.7		compact
9	17.8	+ 52 39		15.6		
9	17.8	+ 55 04		15.3		compact
9	18.2	+ 54 16		15.6		
9	18.5	+ 51 12	2841	9.9	+ 662	m <sub>H</sub> = 10.5 Sp
9	18.8	+ 50 59		15.7		
9	19.0	+ 50 40		14.9		double system, bridge + halo
9	19.6	+ 51 04		15.5		
9	19.9	+ 55 02		15.3		

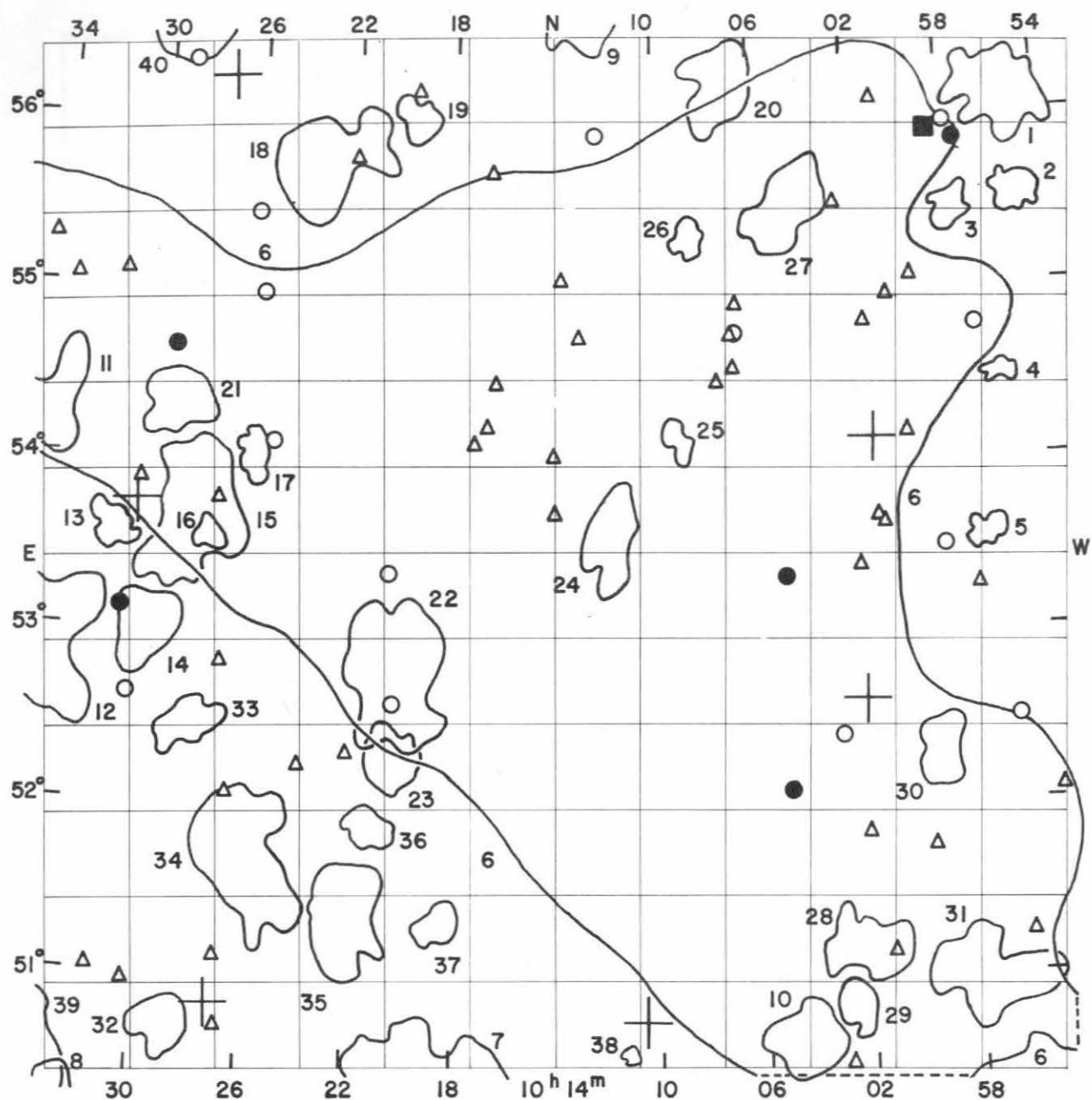
Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
9	20.0	+ 53	49		15.3		
9	20.6	+ 51	45		15.4		
9	21.0	+ 56	20		15.2		
9	21.3	+ 56	06		14.8		
9	21.9	+ 50	47		15.7		
9	22.0	+ 50	38		15.1		
9	22.6	+ 50	40		14.8		
9	24.0	+ 52	26		15.0		
9	24.0	+ 55	34		15.1		compact
9	24.1	+ 56	07		15.7		
9	25.0	+ 51	02		15.2		
9	26.6	+ 56	04		14.5		
9	27.7	+ 52	51		14.9		
9	29.1	+ 52	06		15.5		extremely diffuse
9	30.2	+ 51	54		15.5		
9	30.5	+ 51	46		14.7		faint companion
9	32.4	+ 54	49		14.8		
9	33.2	+ 53	20		15.4		
9	35.3	+ 52	04		15.4		compact
9	38.5	+ 54	31		15.7		
9	41.0	+ 56	00		15.3		diffuse spiral
9	41.3	+ 51	55		15.0		
9	41.8	+ 53	55		15.1		
9	42.7	+ 54	50		15.0		
9	43.3	+ 54	40		15.2		
9	43.4	+ 54	41		15.1		
9	43.6	+ 54	32		15.4		
9	43.7	+ 56	20		15.2		double system
9	43.8	+ 54	03		15.7		triple system
9	43.9	+ 54	43		15.5		compact
9	44.5	+ 54	02		15.6		compact
9	44.5	+ 54	15		14.0		
9	44.9	+ 54	14		15.4		diffuse
9	46.0	+ 55	48		15.7		
9	47.2	+ 52	31		15.4		
9	50.2	+ 52	39		15.3		compact
9	51.0	+ 53	53		15.6		double system, faint jet
9	52.5	+ 53	55		15.3		
9	53.4	+ 53	23		15.0		double system, contact
9	54.5	+ 52	05		15.1		
9	55.9	+ 51	15		15.2		
9	56.0	+ 52	30		14.9		compact
9	56.9	+ 54	47		14.9		
9	57.4	+ 55	51	3073	13.8		
9	57.8	+ 55	57		14.6		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2841	10.1	Sb	10.02	Sb	10.0	Sb	10.10	Sb-







FIELD No. 266

$10^{\text{h}}14^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 1331

#### GC STARS

Nos.	R. A.			Decl.			$m_p$
	h	m	s	°	'	"	
13827	10	01	17.8	+	54	08 04	5.74
13842	10	01	54.4	+	52	36 51	6.15
14030	10	10	33.2	+	50	44 39	6.63
14414	10	27	09.9	+	50	49 34	6.70
14427	10	27	26.5	+	56	14 16	4.84
14498	10	30	36.2	+	53	45 21	6.44

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0955.0 + 5530	medium compact	86	1.4	VD	2
0955.4 + 5605	open	125	2.8	VD	1
0956.0 + 5429	compact	80	0.9	ED	4
0956.9 + 5332	medium compact	82	1.1	ED	5
0957.7 + 5059	medium compact	111	3.2	D	31
0957.7 + 5525	medium compact	93	1.3	ED	3
0959.0 + 5217	medium compact	116	1.8	ED	30
1002.2 + 5110	medium compact	235	2.3	ED	28
1002.8 + 5050	medium compact	89	1.4	VD	29
1004.5 + 5527	medium compact	162	2.5	ED	27
1004.7 + 5038	medium compact	111	2.3	VD	10
1007.1 + 5613	medium compact	76	2.2	VD	20
1008.5 + 5517	medium compact	63	1.1	ED	26
1009.0 + 5407	medium compact	65	1.1	ED	25
1011.3 + 5035	compact	48	0.5	ED	38
1012.0 + 5334	medium compact	128	2.3	VD	24
1012.8 + 5337	open	685	28.3	Near	6
1013.0 + 5634	medium compact	154	2.1	ED	9
1018.6 + 5119	compact	88	1.3	ED	37
1018.8 + 5020	compact	301	4.6	VD	7
1019.6 + 5600	medium compact	94	1.3	ED	19
1020.3 + 5246	open	102	3.8	MD	22
1020.4 + 5216	medium compact	152	2.0	ED	23
1021.1 + 5153	medium compact	55	1.3	VD	36
1022.0 + 5120	compact	176	3.0	ED	35
1023.2 + 5543	medium compact	123	3.3	D	18
1025.8 + 5140	open	86	4.0	D	34
1026.0 + 5400	medium compact	85	1.3	VD	17
1027.8 + 5334	compact	79	0.9	ED	16
1028.3 + 5340	medium compact	112	3.5	MD	15
1028.4 + 5228	medium compact	111	1.7	ED	33
1028.9 + 5042	medium compact	110	1.8	ED	32
1029.2 + 5420	open	60	2.1	D	21
1029.3 + 5736	medium compact	210	12.0	Near	40
1030.0 + 5300	medium compact	84	2.2	D	14
1031.5 + 5335	medium compact	98	1.4	VD	13
1032.6 + 5015	medium compact	87	1.7	VD	8
1034.4 + 5416	medium compact	117	2.7	D	11
1034.5 + 5254	open	180	4.3	D	12
1035.3 + 5013	medium compact	108	5.5	Near	39

Average number of galaxies per cluster = 128.2

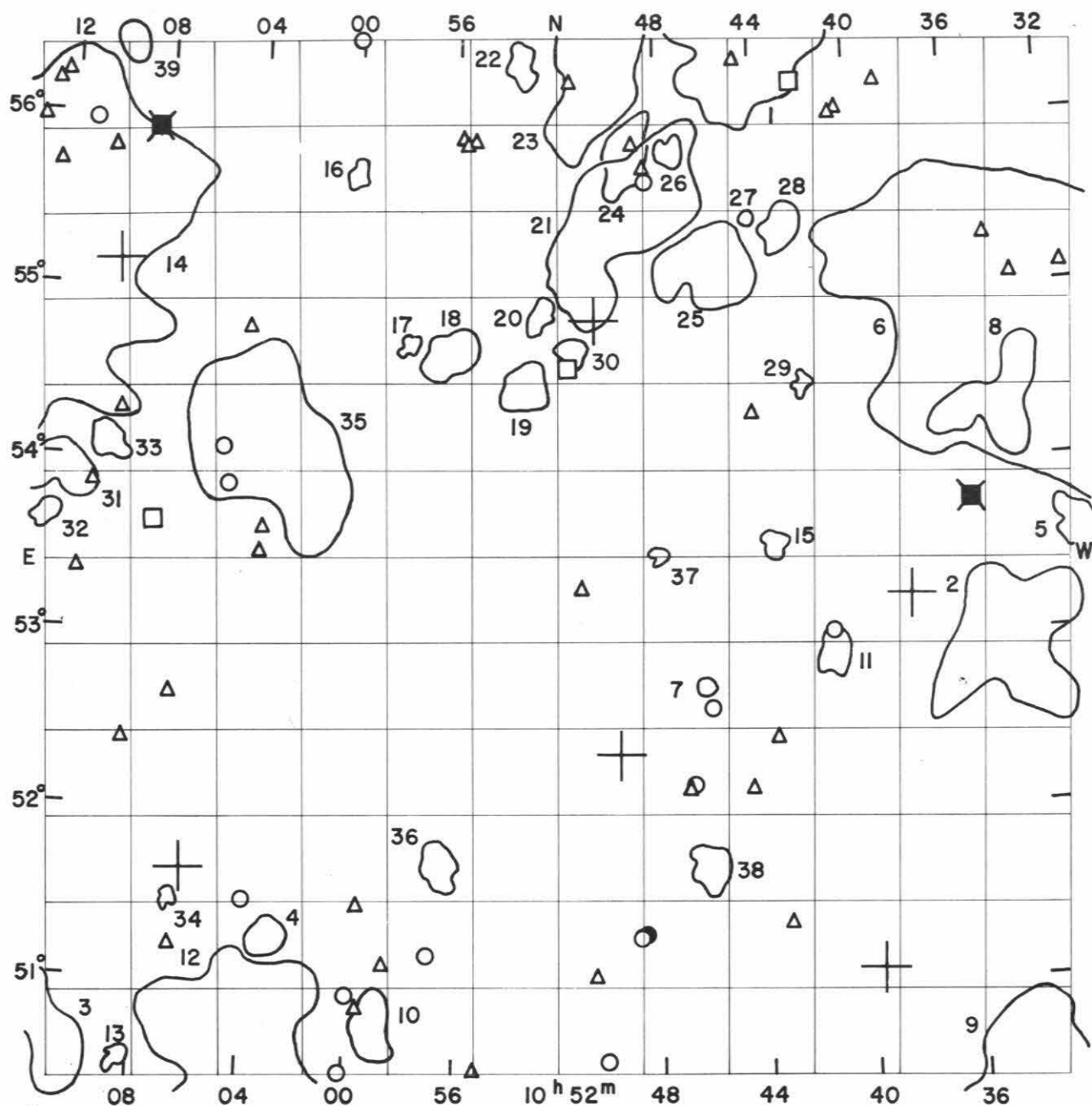
## GALAXIES

Position a 1950 $\delta$ h m o	NGC IC*	$m_p$	$V_s$ km/sec	Remarks
9 54.5 + 52 05		15.1		
9 55.9 + 51 15		15.2		
9 56.0 + 52 30		14.9		compact
9 56.9 + 54 47		14.9		
9 57.3 + 53 16		15.4		compact
9 57.4 + 55 51	3073	13.8		
9 57.8 + 55 57		14.6		
9 58.5 + 55 55	3079	11.2	+ 1171	$m_H = 11.9$ Sc

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ 1950 $\delta$							
h	m	o	i				
9	58.6	+	53 30		14.8		
9	59.5	+	51 46		15.3		very compact
9	59.6	+	55 04		15.7		compact
10	00.0	+	54 10		15.6		
10	00.6	+	54 57		15.6		
10	00.9	+	56 06		15.7		compact
10	01.0	+	53 38		15.7		
10	01.2	+	51 10		15.6		
10	01.2	+	53 41		15.3		
10	01.5	+	54 48		15.4		compact
10	02.0	+	51 52		15.7		
10	02.0	+	53 24		15.3		
10	02.6	+	55 30		15.7		
10	02.8	+	52 25		15.0		
10	02.9	+	50 30		15.7		
10	04.8	+	53 20		13.8		
10	04.9	+	52 06		13.9		
10	06.7	+	54 55		15.6		
10	06.8	+	54 33		15.5		compact
10	06.8	+	54 44		14.8		
10	06.9	+	54 44		15.7		quadruple system
10	07.5	+	54 28		15.4		very compact
10	12.4	+	55 55		14.6		
10	13.1	+	54 44		15.5		
10	13.8	+	55 04		15.2		
10	14.0	+	53 43		15.3		
10	14.1	+	54 03		15.7		
10	16.5	+	54 28		15.6		extremely compact
10	16.6	+	55 40		15.3		
10	16.8	+	54 13		15.5		
10	17.2	+	54 07		15.2		compact
10	19.7	+	56 09		15.7		diffuse spiral
10	20.4	+	52 36		15.0		
10	20.6	+	53 21		14.2		double system in contact
10	22.0	+	52 19		15.3		
10	22.1	+	55 46		15.1		double system
10	24.0	+	52 14		15.4		very compact
10	25.3	+	54 07		14.9		
10	25.9	+	54 58		14.8		
10	26.1	+	55 26		14.6		
10	26.7	+	50 42		15.4		double system
10	26.7	+	52 04		15.3		
10	26.9	+	51 06		15.5		
10	27.1	+	52 49		15.6		
10	27.5	+	53 46		15.6		
10	29.2	+	56 19	3264	14.3		
10	29.4	+	54 38		13.2		
10	30.3	+	50 58		15.5		
10	30.5	+	53 52		15.5		
10	30.6	+	52 37		14.9		
10	31.1	+	53 07		14.0		
10	31.5	+	55 05		15.7		
10	31.7	+	51 01		15.7		very diffuse spiral
10	33.6	+	55 02		15.5		double system in halo
10	34.6	+	55 16		15.4		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
3079	- -	- -	- Sc	11.10 Sc-



FIELD No. 267

$10^{\text{h}}52^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 673

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
14681	10	38	13.8	+	53	13 56	7.10
14719	10	39	50.8	+	51	03 40	7.20
14941	10	49	40.4	+	52	20 15	6.93
14962	10	50	33.5	+	54	51 05	5.36
15327	11	06	24.0	+	51	39 00	7.12
15399	11	09	50.6	+	55	09 59	6.48

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1012.8 + 5337	open	685	28.3	Near	6
1031.5 + 5335	medium compact	98	1.4	VD	5
1034.4 + 5416	medium compact	117	2.7	D	8
1034.5 + 5254	open	180	4.3	D	2
1035.3 + 5013	medium compact	108	5.5	Near	9
1041.2 + 5253	medium compact	74	1.2	VD	11
1042.1 + 5426	medium compact	49	0.6	ED	29
1042.8 + 5521	medium compact	84	1.3	ED	28
1043.4 + 5332	compact	58	0.8	ED	15
1043.9 + 5635	open	74	5.5	Near	1
1044.2 + 5525	medium compact	42	0.4	ED	27
1045.8 + 5508	medium compact	193	2.9	VD	25
1046.1 + 5140	medium compact	69	1.3	VD	38
1046.2 + 5243	compact	35	0.5	ED	7
1047.3 + 5549	medium compact	58	0.9	ED	26
1048.0 + 5329	compact	48	0.5	ED	37
1049.1 + 5547	medium compact	131	1.8	ED	24
1049.4 + 5525	medium compact	160	4.5	MD	21
1050.2 + 5618	open	151	3.8	MD	23
1051.4 + 5440	medium compact	59	0.9	ED	30
1052.7 + 5453	compact	68	0.9	ED	20
1053.4 + 5427	medium compact	82	1.5	ED	19
1053.4 + 5618	medium compact	57	1.1	ED	22
1056.2 + 5439	compact	107	1.6	ED	18
1056.5 + 5141	medium compact	90	1.3	ED	36
1057.9 + 5442	compact	54	0.6	ED	17
1059.0 + 5044	compact	126	1.6	D	10
1100.0 + 5541	compact	58	0.7	ED	16
1103.0 + 5115	open	70	1.1	ED	4
1103.4 + 5405	open	131	5.1	D	35
1103.5 + 5029	open	176	6.5	MD	12
1106.7 + 5128	compact	45	0.5	ED	34
1108.4 + 5032	compact	56	0.6	ED	13
1109.7 + 5625	compact	55	1.1	ED	39
1109.9 + 5405	compact	90	1.1	VD	33
1111.0 + 5037	medium compact	82	2.8	D	3
1112.0 + 5355	medium compact	63	2.0	D	31
1112.2 + 5339	medium compact	70	0.8	ED	32
1114.3 + 5457	medium compact	245	11.2	Near	14

Average number of galaxies per cluster = 107.6

## GALAXIES

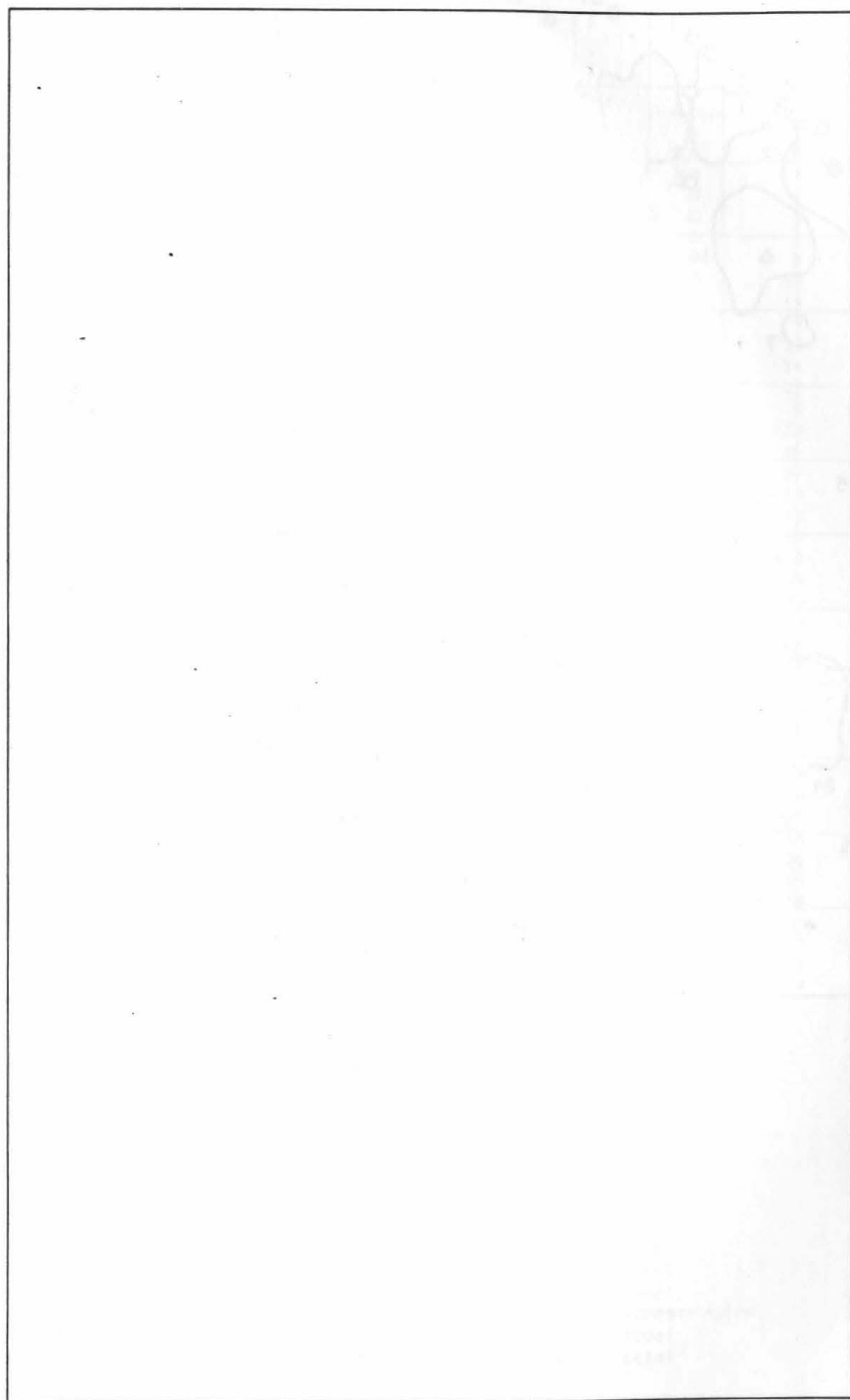
Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
10	31.5	+ 55 05		15.7		
10	33.6	+ 55 02		15.5		double system in halo
10	34.6	+ 55 16		15.4		
10	35.7	+ 53 45	3310	11.0	+ 1019	$m_H = 10.9$ Sb
10	38.7	+ 56 12		15.5		
10	40.4	+ 56 02		15.3		
10	40.7	+ 56 00		15.2		
10	41.2	+ 53 01		14.6		
10	42.2	+ 56 13	3353	12.9		$m_H = 13.0$

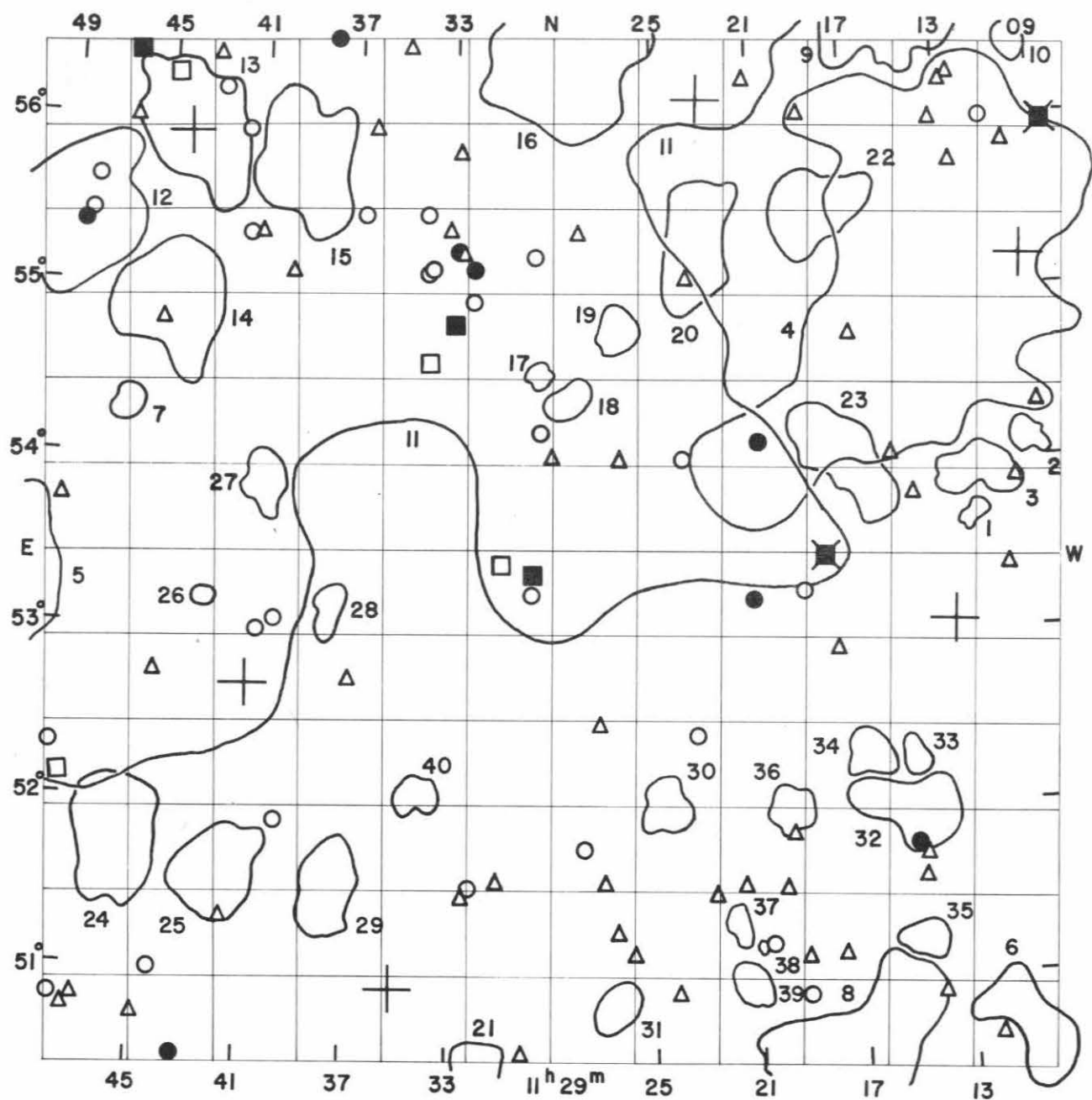
Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
10	43.3	+	51 21		15.1		
10	43.6	+	52 25		15.7		
10	44.2	+	54 18		15.6		diffuse spiral
10	44.5	+	52 08		15.5		
10	44.6	+	56 20		15.2		
10	46.1	+	52 36		14.6		
10	46.8	+	52 10		15.0		
10	47.0	+	52 09		15.6		compact
10	48.4	+	55 39	644*	14.4		
10	48.5	+	55 44	646*	15.7		
10	48.8	+	51 18	3406	13.7		double system, halo + plumes
10	48.9	+	51 17	3410	14.8		
10	49.0	+	55 52	3398	15.3		
10	50.2	+	50 34		14.5		
10	50.7	+	51 03		15.5		
10	51.1	+	53 18		15.4		
10	51.5	+	56 13		15.7		
10	51.6	+	54 35	3448	12.2		$m_H = 12.6$ Sc
10	55.2	+	50 29		15.6		
10	55.3	+	55 53		15.7		
10	55.7	+	55 52		15.7		
10	55.8	+	55 54		15.7		
10	57.1	+	51 12		14.3		
10	58.8	+	51 07		15.6		
10	59.6	+	50 52		15.3		
10	59.7	+	51 28		15.6		
11	00.0	+	50 57		14.5		double system
11	00.0	+	56 29	3499	14.3		
11	00.2	+	50 29		14.5		
11	03.7	+	53 39		15.3		
11	03.8	+	53 30		15.7		
11	04.0	+	51 30		14.2		
11	04.5	+	54 47		15.5		
11	05.1	+	53 54		14.1		
11	05.4	+	54 06		14.7		
11	06.8	+	51 13		15.4		
11	07.1	+	52 40		15.5		
11	08.0	+	53 40	3549	12.8		$m_H = 12.8$ Sc
11	08.5	+	55 56	3556	10.7	+ 643	$m_H = 11.0$ Sb
11	08.9	+	52 24		15.5		
11	09.4	+	54 18		15.4		
11	10.3	+	55 50		15.7		
11	10.5	+	53 52		15.7		extremely diffuse spiral
11	11.0	+	53 22		15.6		
11	11.2	+	55 59		14.9		
11	12.4	+	56 14		15.1		
11	12.6	+	55 44		15.4		
11	12.8	+	56 11		15.6		
11	13.3	+	55 58	3594	15.2		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3310	-	-	11.22	Sb	10.8	Sb	-	-
3556	-	-	10.63	Sc	10.4	Sc	10.57	Sc+







FIELD No. 268

$11^{\text{h}}29^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 59

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
15399	11	09	50.6	+ 55 09 59	6.48
15485	11	13	12.0	+ 53 02 42	6.34
15686	11	23	08.6	+ 56 07 29	5.85
15947	11	35	11.2	+ 50 53 43	5.99
16091	11	41	07.2	+ 52 40 21	7.30
16153	11	44	15.6	+ 55 54 23	5.41

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1109.7 + 5625	compact	55	1.1	ED	10
1109.9 + 5405	compact	90	1.1	VD	2
1111.0 + 5037	medium compact	82	2.8	D	6
1112.0 + 5355	medium compact	63	2.0	D	3
1112.2 + 5339	medium compact	70	0.8	ED	1
1114.3 + 5457	medium compact	245	11.2	Near	4
1114.8 + 5111	compact	88	1.3	ED	35
1114.9 + 5215	medium compact	68	1.0	ED	33
1114.9 + 5637	medium compact	355	3.8	D	9
1115.0 + 5157	medium compact	99	2.7	D	32
1116.6 + 5216	medium compact	73	1.5	ED	34
1117.2 + 5400	medium compact	89	3.0	MD	23
1117.6 + 5033	medium compact	203	4.8	MD	8
1118.3 + 5528	medium compact	91	2.8	D	22
1119.8 + 5158	compact	62	1.4	ED	36
1121.0 + 5110	compact	33	0.3	ED	38
1121.4 + 5056	medium compact	74	1.3	ED	39
1121.8 + 5118	compact	73	1.0	ED	37
1123.1 + 5516	medium compact	78	3.1	D	20
1124.5 + 5200	compact	62	1.5	ED	30
1126.4 + 5445	compact	80	1.3	ED	19
1126.5 + 5048	compact	66	1.4	ED	31
1128.4 + 5422	compact	66	1.3	ED	18
1128.4 + 5618	compact	178	4.6	MD	16
1129.6 + 5430	compact	59	0.8	ED	17
1131.7 + 5028	compact	106	1.6	ED	21
1134.3 + 5202	medium compact	73	1.2	ED	40
1137.5 + 5128	medium compact	125	2.4	ED	29
1137.8 + 5306	compact	80	1.2	ED	28
1138.7 + 5650	medium compact	2690	49.2	Near	11 *
1139.3 + 5544	compact	148	3.8	D	15
1140.5 + 5351	medium compact	90	1.6	ED	27
1141.9 + 5133	compact	136	2.9	VD	25
1142.9 + 5310	compact	43	0.6	ED	26
1144.0 + 5555	compact	144	4.0	Near	13
1144.6 + 5452	compact	89	3.8	Near	14
1145.7 + 5144	compact	195	3.5	D	24
1146.3 + 5416	medium compact	44	1.0	ED	7
1148.6 + 5523	medium compact	121	4.5	MD	12
1151.7 + 5302	medium compact	110	5.6	MD	5

Average number of galaxies per cluster = 167.4

\*) see special map on page 387

## GALAXIES

Position $\alpha$ 1950 $\delta$	NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h m o				
11 08.5 + 55 56	3556	10.7	+ 643	$m_H = 11.0$ Sb
11 09.4 + 54 18		15.4		
11 10.3 + 55 50		15.7		
11 10.5 + 53 52		15.7		extremely diffuse spiral
11 11.0 + 53 22		15.6		
11 11.2 + 55 59		14.9		

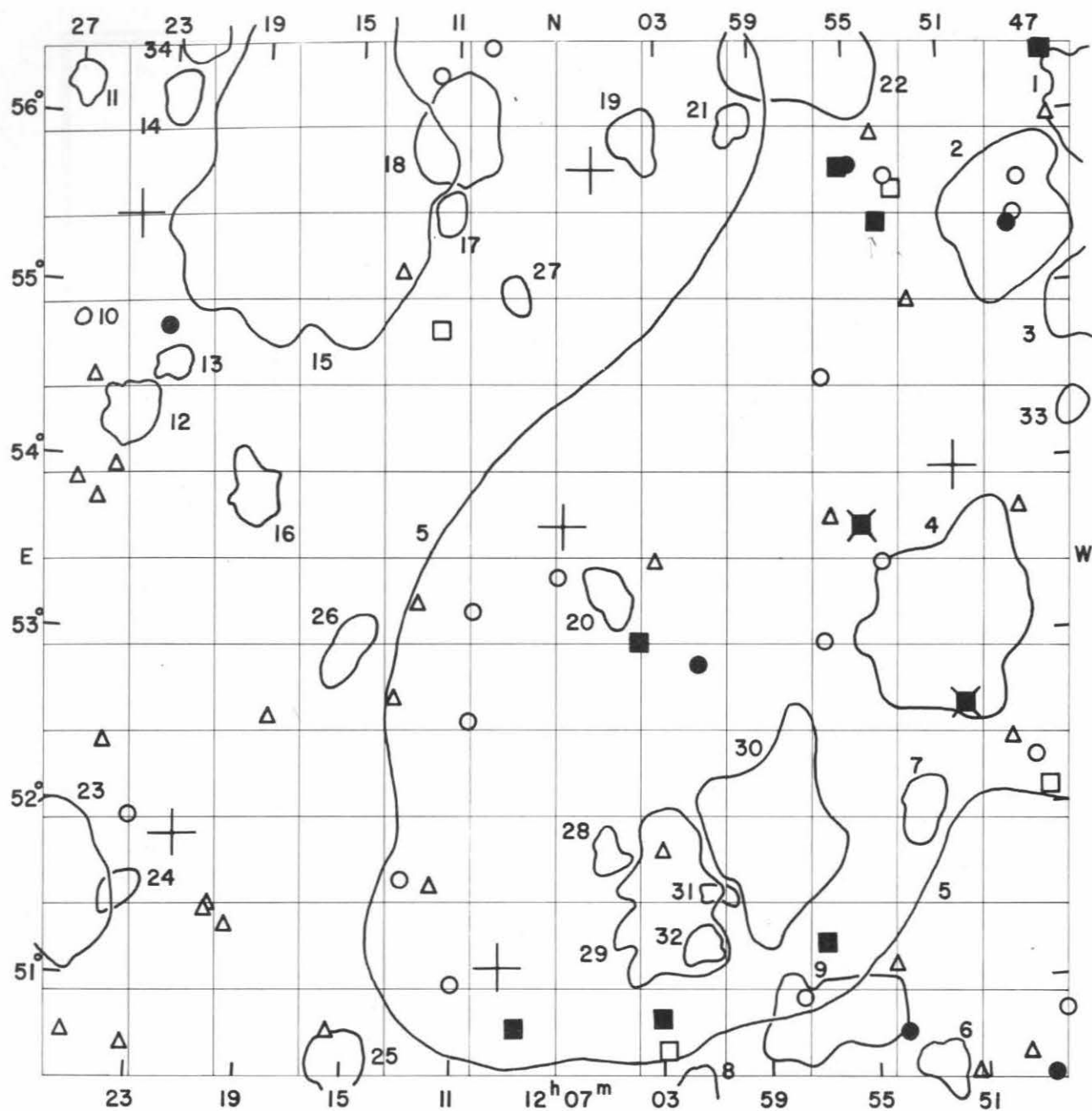
Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	'				
11	12.1	+ 50	38		15.7		
11	12.4	+ 56	14		15.1		
11	12.6	+ 55	44		15.4		
11	12.8	+ 56	11		15.6		
11	13.3	+ 55	58	3594	15.2		
11	14.2	+ 50	53		15.4		
11	14.6	+ 51	41		15.6		compact
11	14.6	+ 53	48		15.3		compact
11	14.7	+ 51	33		15.2		compact
11	15.0	+ 51	46		13.7		SBb + outer loop
11	15.4	+ 54	02		15.2		double system, connected
11	17.0	+ 54	44		15.4		diffuse spiral
11	17.8	+ 51	07		15.5		compact
11	17.8	+ 52	54		15.7		
11	18.2	+ 53	27	3631	11.0	+ 1087	$m_H = 11.8$ Sc
11	18.9	+ 56	01		15.7		
11	19.1	+ 53	15		14.9		compact
11	19.2	+ 50	53		14.7		
11	19.2	+ 51	06		15.5		
11	19.7	+ 51	49		15.5		compact
11	20.0	+ 51	30		15.5		
11	20.6	+ 51	12		14.9		
11	20.8	+ 54	07	3656	13.4		large plume, loop
11	21.1	+ 53	12	3657	13.1		very compact
11	21.1	+ 56	14		15.4		compact
11	21.6	+ 51	32		15.1		
11	22.7	+ 51	28		15.7		
11	23.4	+ 52	25		15.0		
11	23.6	+ 55	03		15.5		
11	23.8	+ 54	01		14.5		diffuse spiral
11	24.2	+ 50	53		15.6		very compact
11	25.9	+ 51	08		15.1		double system
11	26.4	+ 54	00		15.5		
11	26.5	+ 51	15		15.7		
11	27.0	+ 51	32		15.4		double system
11	27.2	+ 52	28		15.7		
11	27.8	+ 51	45		14.7		
11	28.0	+ 55	20		15.7		
11	29.0	+ 54	01		15.7		
11	29.5	+ 54	11		14.6		
11	29.7	+ 55	12		14.9		
11	29.8	+ 53	21	3718	11.8	+ 1050	$m_H = 12.4$ SBb
11	29.9	+ 53	14		14.7		quintuple system
11	30.2	+ 50	33	705*	15.1		compact
11	31.1	+ 53	25	3729	12.2		$m_H = 13.0$
11	31.3	+ 51	33		15.2		very compact
11	32.3	+ 51	31		14.4		
11	32.3	+ 54	56		14.9		
11	32.3	+ 55	08	3733	13.2		
11	32.5	+ 51	27		15.3		compact
11	32.7	+ 55	12		15.4		double system
11	32.8	+ 55	13	3737	13.9		
11	32.8	+ 55	48		15.3		
11	33.0	+ 54	47	3738	11.5		$m_H = 12.2$ I
11	33.2	+ 55	21		15.5		double system
11	33.9	+ 55	08	2943*	15.0		
11	34.0	+ 54	34	3756	12.1		$m_H = 12.5$ Sc
11	34.1	+ 55	06	3759	14.3		
11	34.2	+ 55	26		14.5		

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	s				
11	35.0	+ 56 25		15.5		
11	36.4	+ 55 56		15.3		double system
11	36.7	+ 55 26		14.8		
11	37.0	+ 52 43		15.6		
11	38.1	+ 56 28	3804	13.8		
11	39.7	+ 51 53		14.8		
11	39.7	+ 55 05		15.3		
11	40.1	+ 53 04	3824	14.6		
11	40.8	+ 53 00	3829	15.0		
11	41.0	+ 55 19		15.3		
11	41.5	+ 55 18		14.2		
11	41.6	+ 51 18		15.6		
11	41.7	+ 55 55	3846	14.7		
11	42.9	+ 56 09	3850	14.4		
11	43.1	+ 56 20		15.6		
11	43.3	+ 50 30	3870	13.2		
11	44.3	+ 50 59		14.7		
11	44.7	+ 52 44		15.6		compact
11	44.8	+ 50 43		15.6		
11	44.9	+ 56 14	3888	12.6		$m_H = 13.0$
11	45.0	+ 54 47		15.6		double system
11	46.5	+ 55 58		15.7		double system
11	46.5	+ 56 20	3898	11.7	+ 1038	$m_H = 12.0$ Sa
11	47.1	+ 50 49		15.4		
11	47.5	+ 50 45		15.7		
11	48.0	+ 50 50		14.8		
11	48.0	+ 55 37	3913=740*	14.2		
11	48.1	+ 52 07	3917	12.5		$m_H = 12.8$ Sc
11	48.2	+ 55 25	3916	14.8		
11	48.5	+ 55 21	3921	13.4		eccentric nucleus, outer loops
11	48.6	+ 52 17		14.6		
11	48.8	+ 53 43		15.5		very diffuse spiral

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3556	-	-	10.63	Sc	10.4	Sc	10.57	Sc+
3631	10.6	Sc	-	-	-	Sc	10.91	Sc-
3656	12.4	-	-	-	-	-	-	-
3657	12.5	-	-	-	-	-	-	-
3718	11.8	-	-	-	-	S0p	11.24	S0p
3729	11.7	-	-	-	-	-	11.88	Sc-
3733	11.5	-	-	-	-	-	-	-
3738	11.4	Irr.	-	-	-	-	12.00	Ir.I
3756	11.8	Sc	-	-	-	-	12.05	Sc-
3804	12.5	-	-	-	-	-	-	-
3829	13.1	-	-	-	-	-	-	-
3846	13.7	-	-	-	-	-	-	-
3888	12.7	-	-	-	-	-	-	-
3898	11.0	Sa	-	-	11.7	Sa	-	-
3917	11.9	-	-	-	-	-	-	-
3921	13.45*	-	-	-	-	-	-	-

\*) Listed under NGC 3916 by mistake.



FIELD No. 269

$12^{\text{h}}07^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 1389

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
16268	11	51	12.6	+	53	58 22	2.54
16580	12	05	37.2	+	55	44 33	7.96
16600	12	06	49.6	+	53	40 27	7.55
16656	12	09	11.9	+	51	06 55	8.1
16906	12	21	36.1	+	51	50 20	4.97
16958	12	24	09.5	+	55	26 10	7.04

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1138.7 + 5650	medium compact	2690	49.2	Near	5 *
1144.0 + 5555	compact	144	4.0	Near	1
1144.6 + 5452	compact	89	3.8	Near	3
1146.3 + 5416	medium compact	44	1.0	ED	33
1148.6 + 5523	medium compact	121	4.5	MD	2
1151.7 + 5302	medium compact	110	5.6	MD	4
1152.6 + 5030	medium compact	93	1.5	ED	6
1153.0 + 5200	medium compact	58	1.6	ED	7
1156.6 + 5049	medium compact	97	3.4	VD	9
1156.8 + 5627	compact	172	4.7	Near	22
1158.7 + 5153	medium compact	127	4.9	MD	30
1159.7 + 5559	compact	65	1.1	ED	21
1200.9 + 5131	compact	60	0.8	ED	31
1201.4 + 5115	compact	80	1.1	ED	32
1201.7 + 5022	medium compact	104	1.5	VD	8
1202.6 + 5127	medium compact	103	4.1	D	29
1203.9 + 5555	compact	95	1.6	ED	19
1205.0 + 5146	compact	56	1.1	ED	28
1205.0 + 5316	compact	59	1.5	VD	20
1208.6 + 5500	medium compact	58	1.0	ED	27
1211.0 + 5556	open	81	3.1	D	18
1211.4 + 5529	medium compact	53	1.1	ED	17
1215.0 + 5257	medium compact	69	1.6	ED	26
1215.1 + 5033	medium compact	94	2.1	ED	25
1216.7 + 5542	medium compact	217	9.3	Near	15
1218.9 + 5350	compact	79	1.8	VD	16
1222.0 + 5632	medium compact	144	1.6	VD	34
1222.5 + 5433	medium compact	75	1.1	ED	13
1222.7 + 5607	compact	77	1.3	ED	14
1223.5 + 5130	compact	61	1.3	ED	24
1224.0 + 5415	medium compact	63	1.9	ED	12
1226.2 + 5447	compact	40	0.4	ED	10
1226.6 + 5136	compact	122	4.9	D	23
1226.8 + 5611	medium compact	71	1.1	ED	11

Average number of galaxies per cluster = 166.8

\*) see special map on page 387

## GALAXIES

Position a 1950 6 h m o	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
11 46.5 + 55 58		15.7		double system
11 46.5 + 56 20	3898	11.7	+ 1038	m <sub>H</sub> = 12.0 Sa
11 48.0 + 50 50		14.8		
11 48.0 + 55 37	3913=740*	14.2		
11 48.1 + 52 07	3917	12.5		m <sub>H</sub> = 12.8 Sc
11 48.2 + 55 25	3916	14.8		
11 48.5 + 55 21	3921	13.4		eccentric nucleus, outer loops
11 48.6 + 50 27	3922	13.8		
11 48.6 + 52 17		14.6		
11 48.8 + 53 43		15.5		very diffuse spiral
11 49.4 + 50 35		15.5		
11 49.5 + 52 23		15.6		

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
11	51.1	+ 52 36	3953	10.8	+ 973	$m_H = 11.5$ Sc
11	51.3	+ 50 29		15.6		
11	52.8	+ 54 56		15.6		
11	53.1	+ 55 35	3972	12.9		
11	53.5	+ 55 40	3977=3980	14.7		faint outer ring
11	53.9	+ 50 43		14.0		diffuse spiral
11	53.9	+ 55 23	3982	11.6		$m_H = 11.8$ Sc
11	54.0	+ 55 54		15.4		
11	54.2	+ 51 07		15.4		very diffuse spiral
11	54.2	+ 53 27		14.1		
11	55.0	+ 53 39	3992	10.7	+ 1059	$m_H = 11.2$ SBc
11	55.0	+ 55 43	3990	13.6	+ 720	
11	55.3	+ 55 43	3998	11.2	+ 1084	$m_H = 11.6$ Ep
11	56.1	+ 53 42		15.5		
11	56.4	+ 54 30		14.7		
11	56.6	+ 52 59		14.5		
11	56.8	+ 51 15	4026	11.5	+ 878	$m_H = 12.0$ SBa
11	57.7	+ 50 57		14.9		
12	01.5	+ 52 52	4068	13.3		
12	02.8	+ 50 39	4085	12.8		$m_H = 12.8$ Sb
12	03.0	+ 50 50	4088	11.2	+ 739	$m_H = 11.2$ Sc
12	03.0	+ 51 48		15.3		
12	03.1	+ 53 28		15.7		
12	03.8	+ 53 00	4102	11.8	+ 893	$m_H = 12.1$ SBb
12	07.0	+ 53 24	4142	14.3		
12	08.6	+ 50 47	4157	11.9		$m_H = 12.0$ Sc
12	09.8	+ 56 27	4172	14.4		
12	10.4	+ 52 33		15.0		
12	10.4	+ 53 11	4181	15.0		
12	11.0	+ 51 02	4187	14.5		
12	11.6	+ 54 48	4194	13.0	+ 2585	broken ring, large plume
12	11.8	+ 51 36		15.1		
12	11.9	+ 56 17	4198	14.6		
12	12.5	+ 53 14		15.7		
12	12.9	+ 51 39		14.6		
12	13.2	+ 55 08		15.5		
12	13.3	+ 52 40		15.3		diffuse
12	15.5	+ 50 45		15.7		very compact
12	18.1	+ 52 32		15.6		
12	19.4	+ 51 20		15.7		diffuse spiral
12	20.1	+ 51 27		15.7		
12	20.3	+ 51 26		15.6		
12	22.8	+ 54 47	4384	13.5		
12	23.1	+ 50 37		15.4		
12	23.3	+ 51 57		14.9		
12	24.5	+ 52 21		15.4		
12	24.5	+ 53 58		15.7		
12	25.3	+ 53 47		15.7		
12	25.4	+ 50 41		15.6		
12	25.6	+ 54 28		15.5		
12	26.1	+ 53 53		15.2		

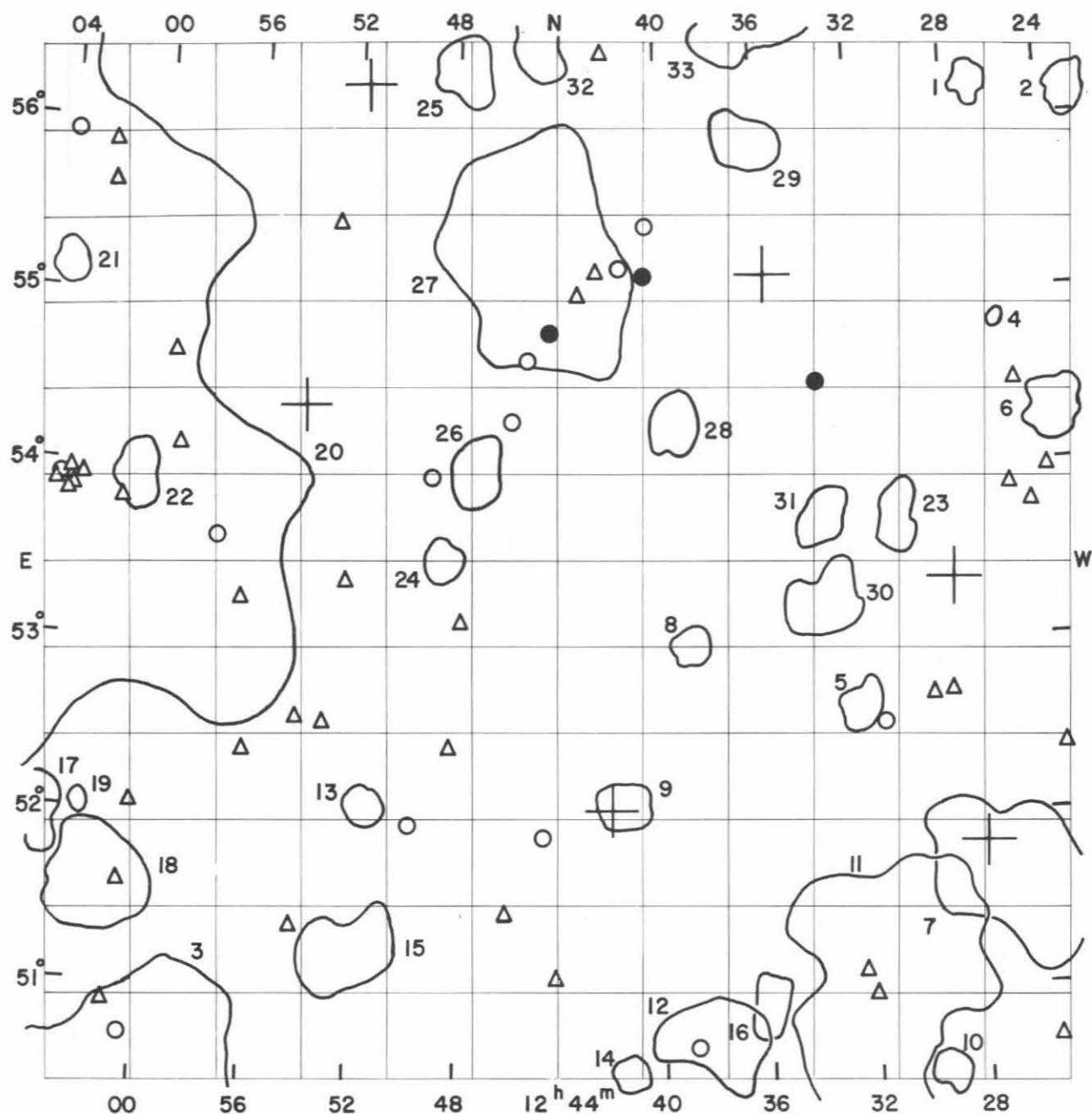
/see



## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3898	10.10	Sa	-	-	11.7	Sa	-	-
3917	11.9	-	-	-	-	-	-	-
3921	13.45*	-	-	-	-	-	-	-
3953	10.3	Sc	10.87	Sb	10.7	SBb	10.71	Sb+
3972	12.9	-	-	-	-	-	-	-
3982	11.6	Sc	-	-	-	-	-	-
3990	-	-	-	-	13.6	S0	-	-
3992	10.3	SBc	-	-	10.5	SBb	10.62	Sb+
3998	11.4	Ep	-	-	11.2	S0	-	-
4026	11.7	-	-	-	11.7	S0	-	-
4085	11.9	-	-	-	-	-	12.79	Sc-
4088	11.3	Sc	-	-	-	Sc	11.03	Sc-
4102	11.9	SBb	-	-	12.3	Sa	-	-
4157	11.4	-	-	-	-	-	-	-
4194	-	-	-	-	-	SB0p	-	-

\*) Listed under NGC 3916 by mistake.



FIELD No. 270

$12^{\text{h}}44^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 729

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	r	"	
17040	12	27	41.3	+	51	48 40	6.25
17053	12	28	27.8	+	53	21 00	6.23
17204	12	35	38.1	+	55	07 40	7.09
17326	12	41	58.8	+	52	02 06	6.98
17518	12	51	50.1	+	56	13 51	1.68
17567	12	54	06.4	+	54	22 11	6.01

## CLUSTERS OF GALAXIES

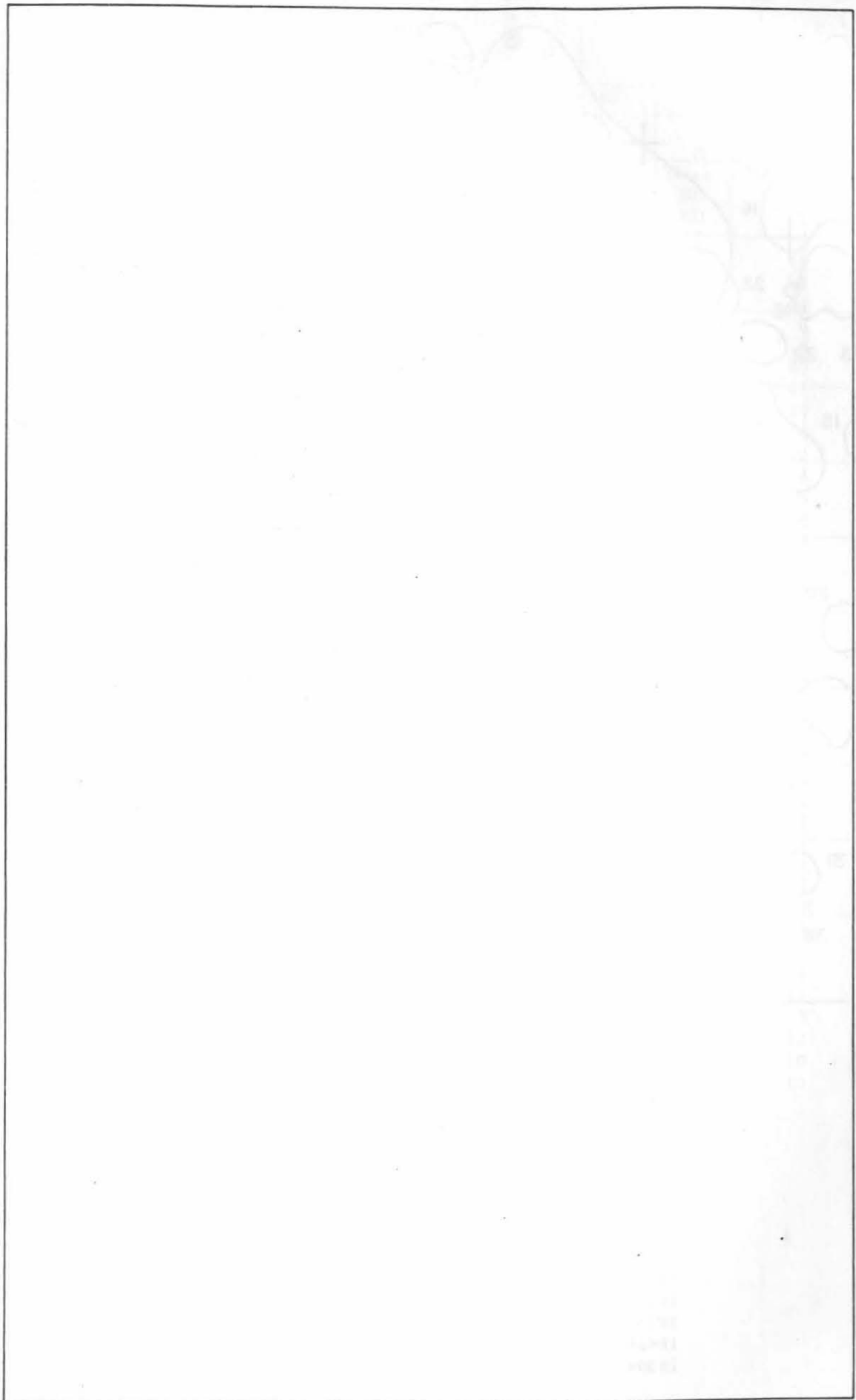
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1222.7 + 5607	compact	77	1.3	ED	2
1224.0 + 5415	medium compact	63	1.9	ED	6
1226.2 + 5447	compact	40	0.4	ED	4
1226.6 + 5136	compact	122	4.9	D	7
1226.8 + 5611	medium compact	71	1.1	ED	1
1229.6 + 5029	compact	62	1.2	ED	10
1230.6 + 5342	compact	128	1.6	ED	23
1231.4 + 5044	medium compact	293	7.8	Near	11
1232.2 + 5237	compact	96	1.4	ED	5
1233.5 + 5344	medium compact	145	1.6	ED	31
1233.6 + 5313	medium compact	160	2.2	ED	30
1235.8 + 5639	medium compact	150	3.0	D	33
1236.0 + 5054	compact	86	1.5	VD	16
1236.3 + 5553	compact	140	2.0	ED	29
1238.0 + 5043	medium compact	122	3.1	VD	12
1238.8 + 5259	compact	58	1.1	ED	8
1239.4 + 5416	medium compact	92	1.8	ED	28
1241.3 + 5030	compact	54	1.1	ED	14
1241.5 + 5205	compact	106	1.6	ED	9
1244.8 + 5630	open	137	2.0	D	32
1244.9 + 5514	medium compact	177	6.6	MD	27
1247.2 + 5400	open	103	2.0	ED	26
1247.9 + 5619	medium compact	91	1.9	VD	25
1248.5 + 5329	compact	60	1.3	ED	24
1251.5 + 5204	compact	73	1.1	ED	13
1252.0 + 5112	medium compact	79	2.8	D	15
1300.6 + 5355	compact	83	1.6	ED	22
1301.5 + 5135	medium compact	133	3.3	D	18
1301.9 + 5001	open	235	11.6	Near	3
1302.3 + 5201	compact	48	0.6	ED	19
1303.9 + 5156	compact	132	2.0	ED	17
1303.9 + 5507	medium compact	64	1.1	ED	21
1313.0 + 5410	medium compact	623	27.3	Near	20

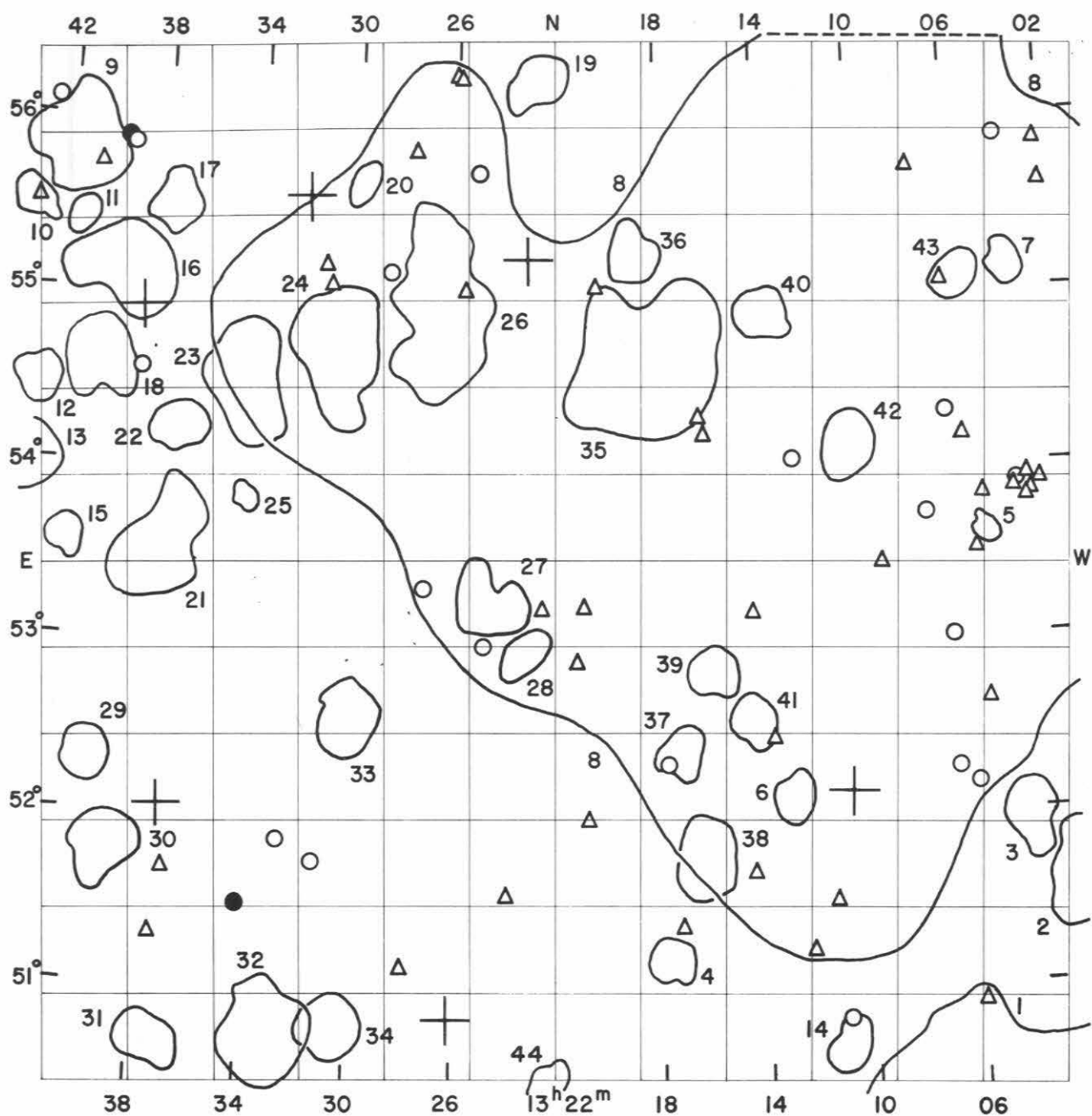
Average number of galaxies per cluster = 124.3

## GALAXIES

Position α 1950 δ	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h m o				
12 24.5 + 52 21		15.4		
12 24.5 + 53 58		15.7		
12 25.3 + 53 47		15.7		
12 25.4 + 50 41		15.6		
12 25.6 + 54 28		15.5		
12 26.1 + 53 53		15.2		
12 28.7 + 52 42		15.7		
12 29.5 + 52 41		15.4		
12 31.4 + 52 32	801*	14.8		
12 32.0 + 50 58		15.7		very compact
12 32.4 + 51 06	4542	15.5		
12 33.6 + 54 30	4566	13.9		
12 38.8 + 50 42	4617	14.2		
12 40.4 + 55 25	4644	14.8		double system
12 40.6 + 55 07	4646	13.8		

Position a 1950 $\delta$				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o	i				
12	41.5	+	55 10		14.1		double system, tidal effects
12	42.3	+	56 25		15.3		
12	42.5	+	55 09	4669	15.1		
12	43.3	+	55 00	4675	15.4		
12	44.1	+	51 05		15.5		
12	44.4	+	54 49	4686	13.7		
12	44.6	+	51 55		14.1		
12	45.3	+	54 39	4695	14.5		
12	46.0	+	54 18		14.9		
12	46.1	+	51 27	4707	15.2		very diffuse
12	47.9	+	53 08	4732	15.2		
12	48.2	+	52 24		15.3		
12	49.0	+	53 58	830*	14.3		
12	49.9	+	51 58		14.3		
12	52.4	+	53 22	4801	15.7		
12	53.0	+	55 25		15.2		
12	53.2	+	52 32		15.1		
12	54.2	+	51 22		15.6		
12	54.2	+	52 34	4834	15.5		
12	56.2	+	52 22		15.7		
12	56.5	+	53 15		15.6		
12	57.5	+	53 37		15.0		
12	59.1	+	54 08		15.7		
12	59.5	+	54 39		15.4		
13	00.4	+	50 43	4932	14.7		
13	00.5	+	52 03		15.6		double system
13	00.8	+	51 36	4938	15.3		
13	01.1	+	50 54		15.6		
13	01.3	+	53 48		15.6		
13	02.3	+	55 37		15.4		
13	02.4	+	55 52		15.6		
13	02.9	+	53 55		15.4		
13	03.3	+	53 52		15.3		compact
13	03.4	+	53 57	847*	15.1		
13	03.5	+	53 50	4967	15.2		
13	03.8	+	53 56	4973	14.9		
13	04.0	+	53 53	4974	15.7		
13	04.0	+	55 55	4977	14.5		





FIELD No. 271

$13^{\text{h}}22^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 675

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
17899	13	10	41.5	+	52	09 52	7.22
18155	13	23	13.5	+	55	14 53	4.02
18217	13	26	08.9	+	50	50 42	6.77
18353	13	32	12.1	+	55	36 15	5.48
18469	13	37	16.7	+	52	03 26	6.52
18504	13	38	50.6	+	54	56 03	4.75

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1301.5 + 5135	medium compact	133	3.3	D	2
1301.9 + 5001	open	235	11.6	Near	1
1303.9 + 5156	compact	132	2.0	ED	3
1303.9 + 5507	medium compact	64	1.1	ED	7
1305.0 + 5336	compact	67	0.8	ED	5
1305.9 + 5505	medium compact	63	1.4	ED	43
1310.3 + 5407	compact	88	1.9	ED	42
1311.0 + 5040	open	80	1.4	ED	14
1312.9 + 5206	compact	144	1.4	ED	6
1313.0 + 5410	medium compact	623	27.3	Near	8
1313.8 + 5453	medium compact	86	1.6	ED	40
1314.3 + 5233	medium compact	96	1.5	ED	41
1315.9 + 5249	medium compact	96	1.5	ED	39
1316.2 + 5146	medium compact	146	2.2	VD	38
1317.1 + 5222	medium compact	115	1.5	VD	37
1317.5 + 5111	medium compact	72	1.4	ED	4
1318.4 + 5436	medium compact	198	4.8	D	35
1318.9 + 5515	compact	141	1.7	ED	36
1322.2 + 5028	medium compact	72	1.2	ED	44
1322.9 + 5615	open	93	1.7	VD	19
1323.2 + 5256	medium compact	118	1.5	ED	28
1324.6 + 5314	medium compact	85	2.2	VD	27
1326.5 + 5454	medium compact	184	4.1	D	26
1329.9 + 5234	medium compact	100	2.2	VD	33
1329.9 + 5539	medium compact	69	1.1	ED	20
1330.4 + 5047	medium compact	208	2.1	ED	34
1330.6 + 5440	medium compact	120	3.4	D	24
1332.8 + 5043	medium compact	110	3.1	MD	32
1334.2 + 5350	compact	48	0.8	ED	25
1334.4 + 5428	medium compact	150	3.1	VD	23
1337.0 + 5413	medium compact	78	1.7	ED	22
1337.2 + 5041	medium compact	109	1.8	VD	31
1337.6 + 5331	open	81	3.1	D	21
1337.7 + 5530	medium compact	63	1.7	VD	17
1339.1 + 5147	open	76	2.1	VD	30
1339.7 + 5506	open	117	2.9	D	16
1340.0 + 5218	medium compact	108	1.6	ED	29
1340.5 + 5435	medium compact	177	2.4	VD	18
1341.3 + 5333	compact	72	1.2	ED	15
1341.6 + 5524	medium compact	68	1.1	VD	11
1341.9 + 5550	medium compact	185	3.1	MD	9
1342.8 + 5427	medium compact	96	1.5	VD	12
1343.6 + 5530	medium compact	96	1.4	VD	10
1344.4 + 5403	medium compact	205	3.7	D	13

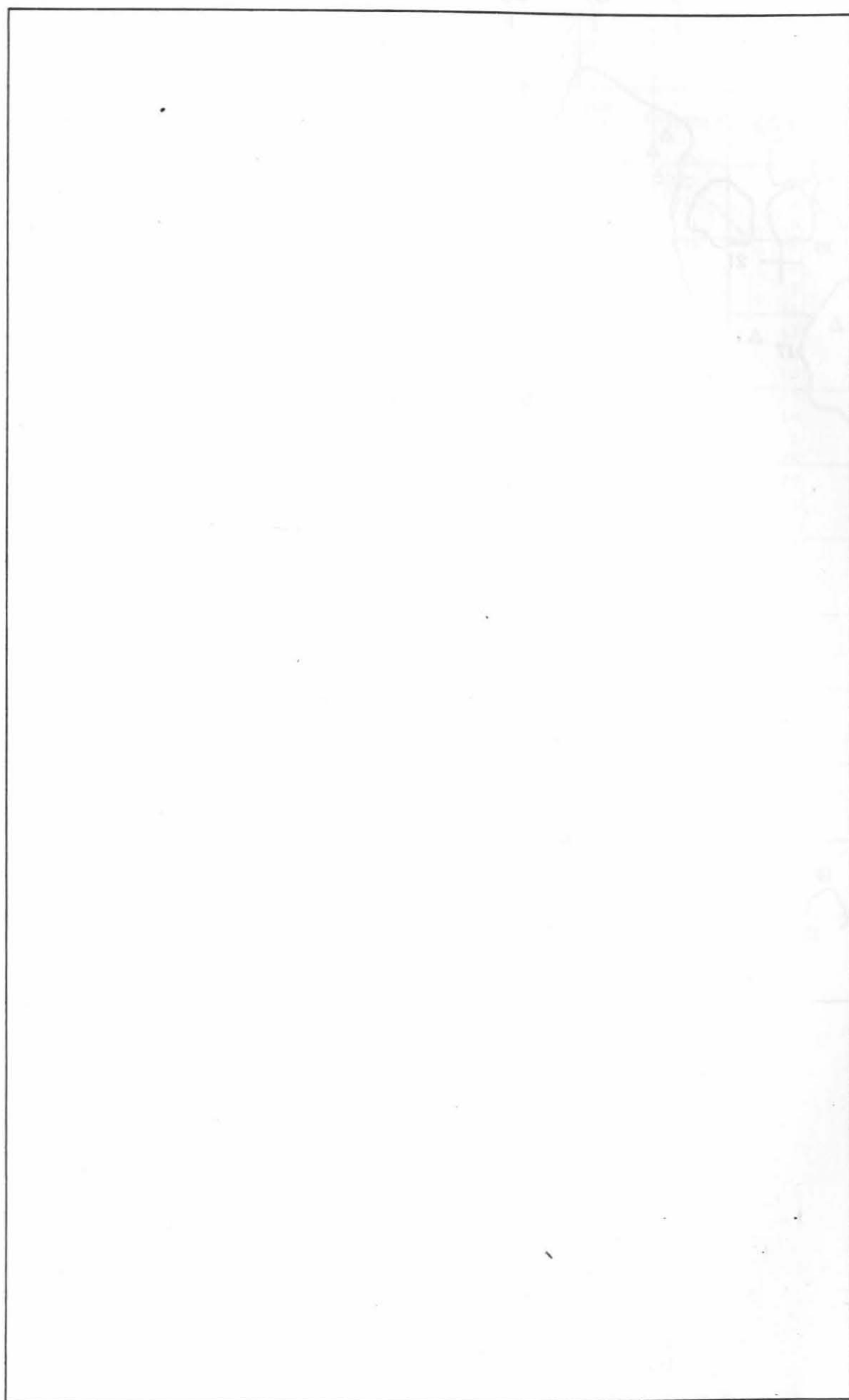
Average number of galaxies per cluster = 124.3

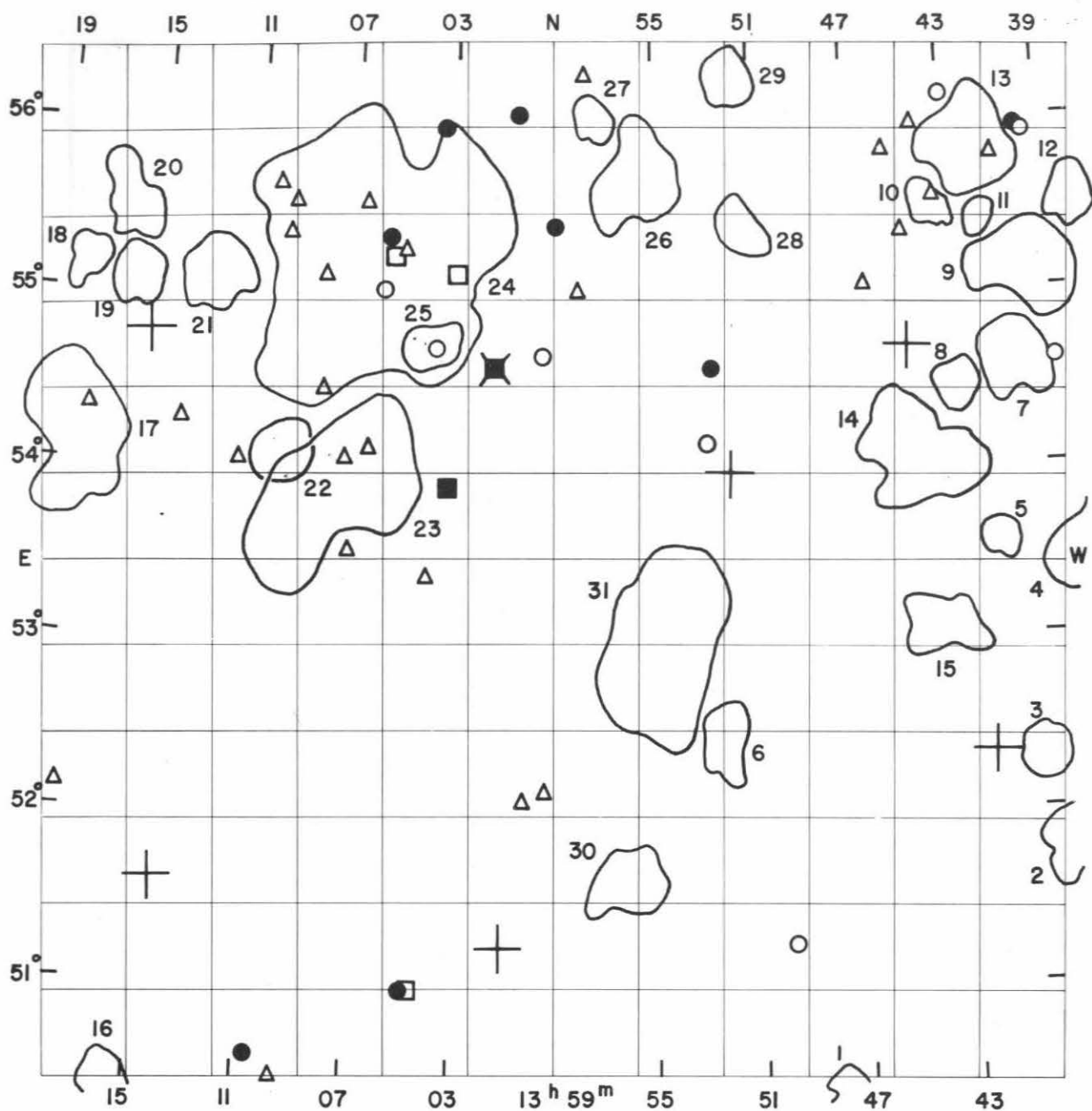
## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
13	02.3	+ 55 37		15.4		
13	02.4	+ 55 52		15.6		
13	02.9	+ 53 55		15.4		
13	03.3	+ 53 52		15.3		compact

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
13	03.4	+ 53 57	847*	15.1		
13	03.5	+ 53 50	4967	15.2		
13	03.8	+ 53 56	4973	14.9		
13	04.0	+ 53 53	4974	15.7		
13	04.0	+ 55 55	4977	14.5		
13	05.2	+ 53 51		15.6		
13	05.3	+ 52 40		15.7		diffuse spiral
13	05.6	+ 53 33		15.1		
13	05.8	+ 52 12	4987	14.6		
13	05.9	+ 54 12		15.3		
13	06.0	+ 50 56	4998	15.2		
13	06.4	+ 55 05		15.2		
13	06.5	+ 52 17		14.7		
13	06.5	+ 53 02	853*	15.0		
13	06.5	+ 54 20		14.2		
13	07.4	+ 53 45	5001	14.6		
13	07.7	+ 55 45		15.7		
13	09.2	+ 53 28		15.5		
13	11.0	+ 50 52		15.0		
13	11.4	+ 51 32	5040	15.1		
13	12.3	+ 51 15		15.7		
13	12.6	+ 54 05		15.0		
13	13.6	+ 52 28		15.6		
13	14.4	+ 51 43		15.6		
13	14.4	+ 53 12		15.5		compact
13	16.2	+ 54 14		15.6		
13	16.4	+ 54 20		15.5		compact
13	17.2	+ 51 24		15.7		
13	17.7	+ 52 20		14.8		triple system
13	20.5	+ 55 05		15.4		
13	20.8	+ 52 00		15.4		
13	21.0	+ 53 15		15.7		
13	21.2	+ 52 55		15.6		twisted streamer
13	22.6	+ 53 14		15.5		
13	24.0	+ 51 35		15.7		
13	24.9	+ 53 01	5163	14.9		
13	25.2	+ 55 45	5164	14.6		
13	25.8	+ 55 04		15.7		
13	26.0	+ 56 16		15.5		
13	26.1	+ 56 17		15.4		
13	27.2	+ 53 20	5201	14.3		
13	27.8	+ 55 52		15.2		
13	27.9	+ 51 10		15.7		
13	28.8	+ 55 10		14.8		
13	31.1	+ 55 05		15.7		
13	31.3	+ 51 46	5225	14.4		
13	31.4	+ 55 13		15.1		
13	32.7	+ 51 53	5238	14.2		
13	34.0	+ 51 30	5250	14.0		
13	37.0	+ 51 42		15.5		diffuse
13	37.4	+ 51 19	907*	15.3		
13	38.7	+ 54 35		14.4		
13	39.5	+ 55 54		14.1		
13	39.8	+ 55 56	5278+5279	13.6		double nebula, connected
13	40.9	+ 55 46		15.6		very compact
13	42.8	+ 56 08		15.0		long jet
13	43.4	+ 55 32	5294	15.2		







FIELD No. 272

$13^{\text{h}}59^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 1409

# GC STARS

Nos.	R. A.			Decl.			$m_p$
	h	m	s	°	'	"	
18572	13	41	58.5	+	52	18 54	5.82
18633	13	44	43.8	+	54	40 55	5.53
18796	13	52	00.7	+	53	58 26	5.65
18990	14	01	08.1	+	51	12 42	6.05
19269	14	14	23.7	+	51	35 50	4.78
19290	14	15	23.8	+	54	46 27	7.06

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1337.6 + 5331	open	81	3.1	D	4
1337.7 + 5530	medium compact	63	1.7	VD	12
1339.1 + 5147	open	76	2.1	VD	2
1339.7 + 5506	open	117	2.9	D	9
1340.0 + 5218	medium compact	108	1.6	ED	3
1340.5 + 5435	medium compact	177	2.4	VD	7
1341.3 + 5333	compact	72	1.2	ED	5
1341.6 + 5524	medium compact	68	1.1	VD	11
1341.9 + 5550	medium compact	185	3.1	MD	13
1342.8 + 5427	medium compact	96	1.5	VD	8
1343.6 + 5530	medium compact	96	1.4	VD	10
1343.7 + 5303	medium compact	111	2.4	VD	15
1344.4 + 5403	medium compact	205	3.7	D	14
1348.0 + 5024	compact	75	1.2	ED	1
1351.3 + 5524	medium compact	76	1.6	VD	28
1351.8 + 5617	compact	80	1.6	ED	29
1352.3 + 5225	medium compact	86	1.8	VD	6
1354.8 + 5257	medium compact	119	4.9	D	31
1355.6 + 5541	compact	221	2.9	ED	26
1356.2 + 5136	medium compact	113	2.2	VD	30
1357.4 + 5601	medium compact	88	1.3	ED	27
1404.0 + 5443	medium compact	75	1.6	ED	25
1406.4 + 5513	open	204	8.1	Near	24
1408.0 + 5353	medium compact	157	5.0	D	23
1409.9 + 5405	medium compact	100	2.0	ED	22
1412.9 + 5506	medium compact	30	2.3	VD	21
1415.5 + 5024	medium compact	76	1.6	ED	16
1416.0 + 5505	compact	86	1.9	ED	19
1416.4 + 5531	medium compact	121	2.1	VD	20
1418.0 + 5510	medium compact	81	1.4	ED	18
1418.3 + 5410	medium compact	80	4.0	VD	17

Average number of galaxies per cluster = 107.2

## GALAXIES

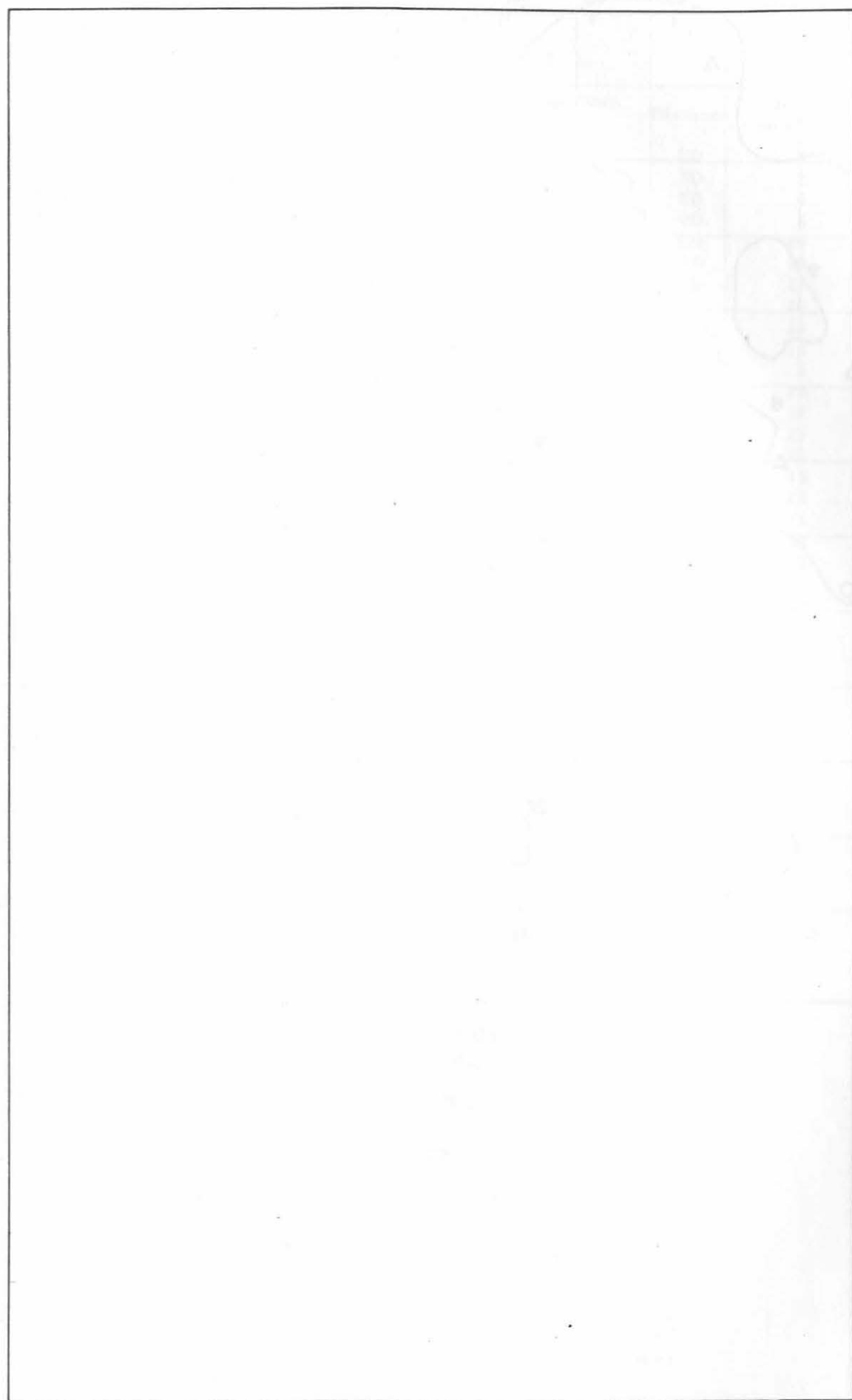
Position α 1950 δ	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h m o				
13 38.7 + 54 35		14.4		
13 39.5 + 55 54		14.1		
13 39.8 + 55 56	5278+5279	13.6		double nebula, connected
13 40.9 + 55 46		15.6		very compact
13 42.8 + 56 08		15.0		long jet
13 43.4 + 55 32	5294	15.2		
13 44.2 + 55 58		15.4		
13 44.8 + 55 20		15.7		
13 45.4 + 55 49		15.5		
13 46.4 + 55 03		15.2		
13 49.8 + 51 15	951*	14.4		
13 52.6 + 54 35	5368	13.8		
13 52.9 + 54 09		14.2		diffuse spiral
13 57.8 + 56 17		15.6		
13 58.1 + 55 01		15.3		
13 58.9 + 55 24	5422	13.1		
13 59.4 + 52 08		15.4		

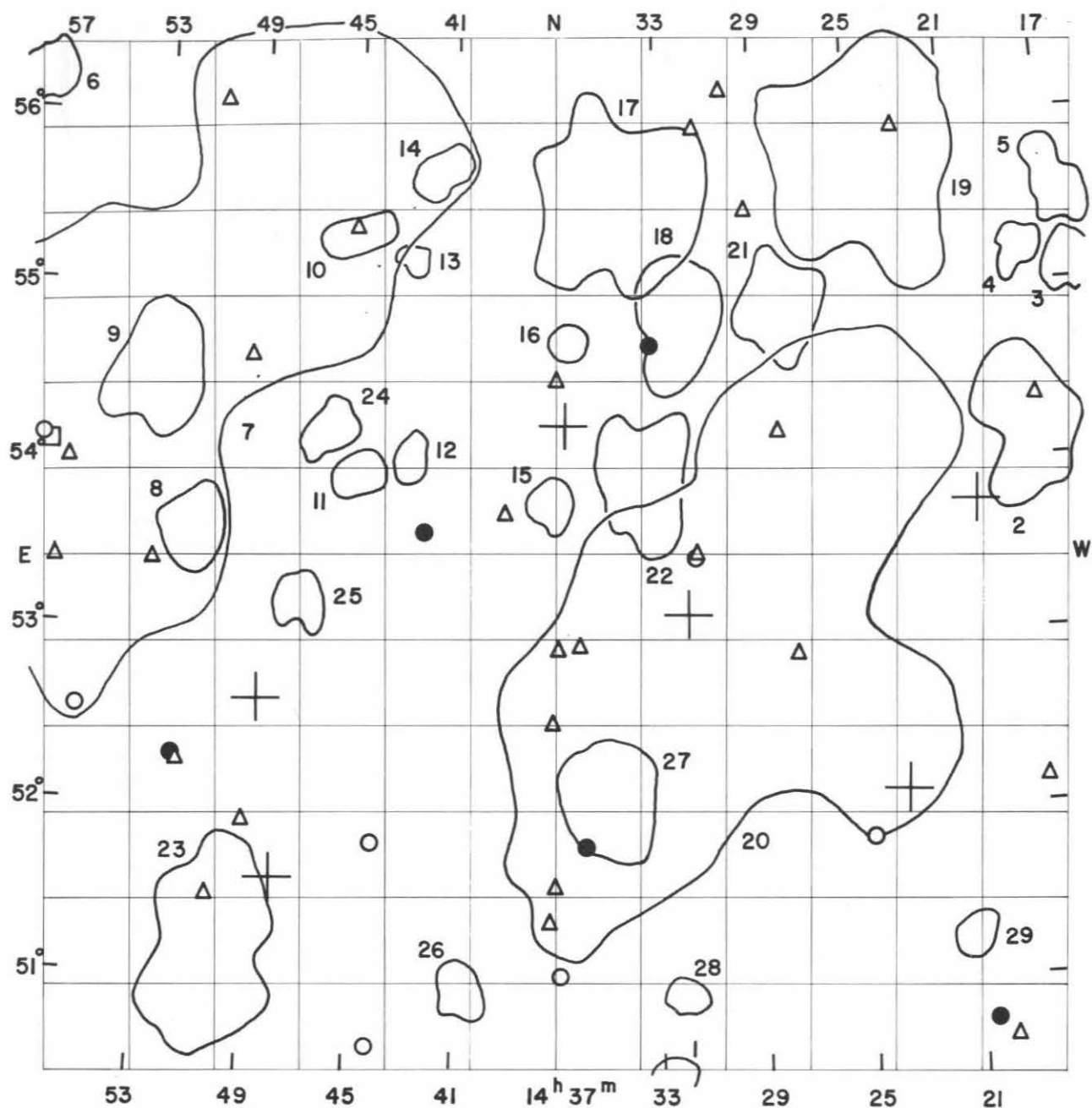
Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
13	59.5	+ 54 40		14.9		
14	00.3	+ 52 05		15.7		
14	00.5	+ 56 03	5443	13.2		
14	01.5	+ 54 35	5457	8.7	+ 247	$m_H = 9.0$ Sc *)
14	03.0	+ 55 08	5473	12.5	+2059	$m_H = 12.8$ SBa
14	03.2	+ 53 54	5474	11.9	+ 247	$m_H = 11.7$ Sc, eccentric nucleus
14	03.5	+ 55 59	5475	13.4		
14	03.8	+ 54 42	5477	14.5		
14	04.1	+ 53 22		15.4		compact
14	04.5	+ 50 59	5480	12.6		$m_H = 12.6$ S
14	04.9	+ 50 59	5481	13.5		
14	05.1	+ 55 16	5484	15.6		
14	05.5	+ 55 15	5485	12.4	+1985	$m_H = 12.9$ Ep
14	05.7	+ 55 20	5486	14.0		
14	06.0	+ 55 02		14.7		compact
14	06.5	+ 54 07		15.6		
14	06.6	+ 55 32		15.5		
14	07.1	+ 53 31		15.6		
14	07.4	+ 54 04		15.4		
14	08.3	+ 55 07		15.1		
14	08.4	+ 54 27		15.1		
14	09.6	+ 50 27		15.1		
14	09.6	+ 55 32		15.7		
14	09.8	+ 55 21		15.3		
14	10.3	+ 55 38		15.5		compact
14	10.5	+ 50 36	5520	13.3		
14	11.6	+ 54 03		15.7		double nucleus
14	14.1	+ 54 16		15.5		diffuse spiral
14	17.8	+ 54 19		15.7		
14	18.1	+ 52 08		15.5		double system, bridge

\*) The NGC numbers 5447, 5449, 5450, 5451, 5453, 5455, 5458, 5461, 5462, 5471 refer to individual knots on the arms of NGC 5457 = M 101.

#### MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5457	8.4	Sc	9.17	Sc	8.5	Sc	8.20	Sc-
5473	-	-	12.39	SB0	12.4	SB0	-	-
5474	11.4	Sc	12.56	Sc	12.1	Sc	11.22	Sc+
5485	-	-	12.58	S0	12.6	S0	-	-





FIELD No. 273

$14^{\text{h}} 37^{\text{m}} + 53^{\circ} 30'$

Survey Plate No. 715

# GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
19390	14	20	18.5	+ 53 44 54	7.43
19467	14	23	29.6	+ 52 04 52	4.06
19646	14	31	50.9	+ 53 07 26	7.37
19742	14	36	40.0	+ 54 14 19	5.52
19969	14	47	54.9	+ 51 34 51	6.42
19984	14	48	38.8	+ 52 37 08	7.09

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1416.0 + 5505	compact	86	1.9	ED	3
1416.4 + 5531	medium compact	121	2.1	VD	5
1418.0 + 5510	medium compact	81	1.4	ED	4
1418.3 + 5410	medium compact	80	4.0	VD	2
1421.1 + 5113	medium compact	54	1.3	ED	29
1424.4 + 5545	compact	245	6.7	MD	19
1427.9 + 5454	medium compact	114	3.0	D	21
1429.9 + 5256	open	190	14.9	Near	20
1432.0 + 5054	compact	63	1.2	ED	28
1432.0 + 5450	compact	95	3.3	D	18
1432.7 + 5023	medium compact	78	1.4	VD	1
1433.4 + 5355	medium compact	97	3.7	D	22
1434.5 + 5532	compact	236	5.4	MD	17
1435.0 + 5203	open	87	3.5	D	27
1436.6 + 5442	compact	60	1.2	ED	16
1437.1 + 5346	compact	86	1.5	ED	15
1440.6 + 5056	compact	73	1.6	VD	26
1441.7 + 5542	medium compact	143	1.6	ED	14
1442.9 + 5401	medium compact	60	1.2	ED	12
1442.9 + 5511	medium compact	54	0.9	ED	13
1444.9 + 5356	medium compact	80	1.4	ED	11
1445.0 + 5520	open	77	1.7	ED	10
1446.0 + 5412	medium compact	105	1.7	ED	24
1447.0 + 5313	compact	92	1.7	ED	25
1450.1 + 5109	medium compact	121	5.1	MD	23
1451.4 + 5335	compact	141	2.3	VD	8
1453.0 + 5429	medium compact	121	3.5	MD	9
1457.5 + 5415	open	245	19.9	Near	7
1458.4 + 5613	medium compact	92	1.7	VD	6

Average number of galaxies per cluster = 109.6

## GALAXIES

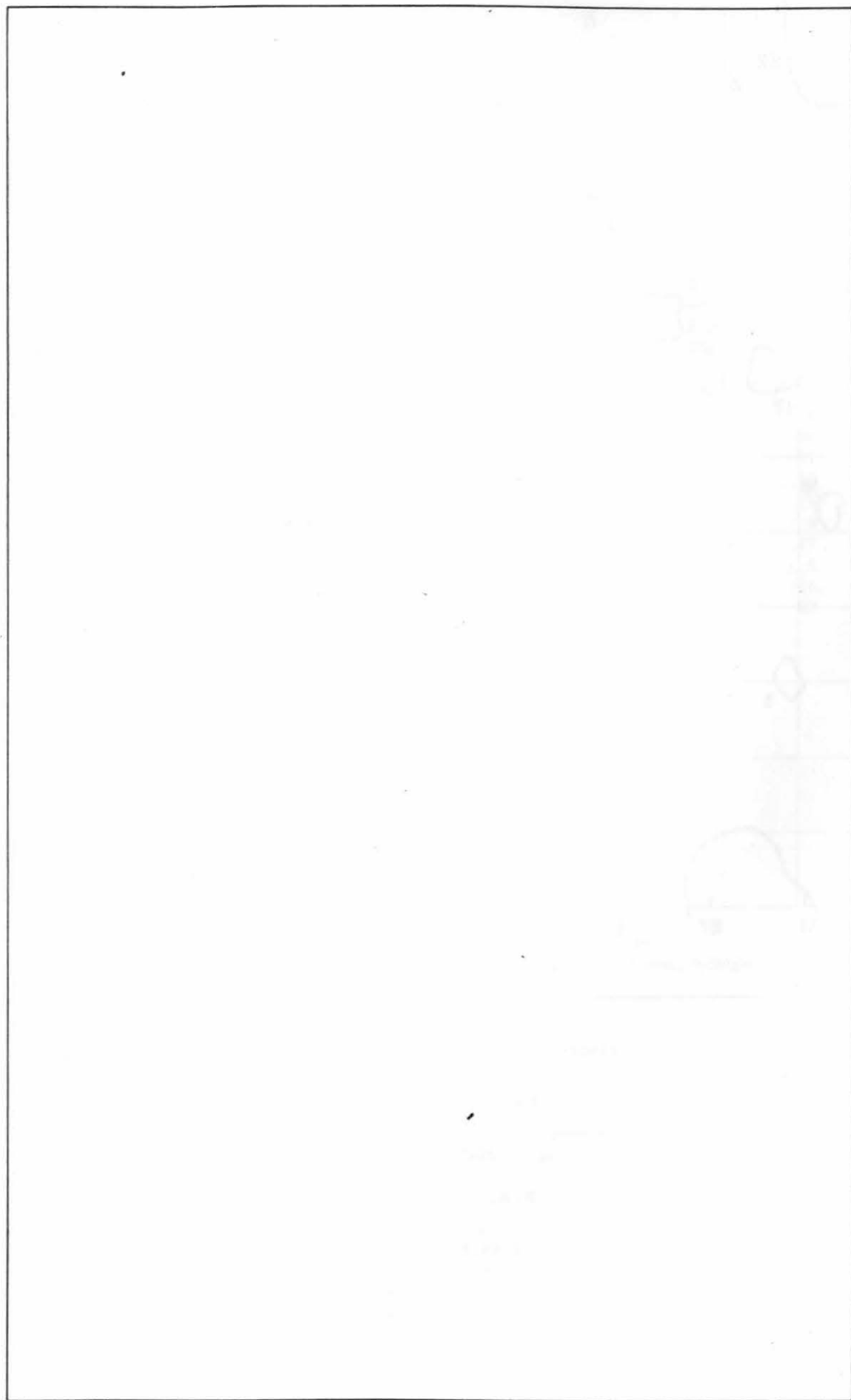
Position			NGC IC*	m <sub>P</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
14	17.8	+ 54 19		15.7		
14	18.1	+ 52 08		15.5		double system, bridge
14	19.8	+ 50 39		15.3		
14	20.5	+ 50 45	5602	13.5		
14	23.1	+ 55 55		15.5		compact
14	24.8	+ 51 50	5624	14.1		
14	27.6	+ 52 53		15.4		
14	28.2	+ 54 12	1027*	15.4		
14	29.3	+ 55 28		15.6		compact
14	30.2	+ 56 10		15.4		
14	31.4	+ 55 57		15.7		compact
14	31.5	+ 53 30		15.4		
14	31.6	+ 53 28		15.0		
14	33.3	+ 54 42	5687	13.3	+ 2119	m <sub>H</sub> = 12.7 S
14	35.9	+ 51 48	5707	13.3		double system
14	36.1	+ 52 57		15.6		
14	36.8	+ 51 04	5720	14.7		
14	37.0	+ 51 34		15.5		
14	37.0	+ 52 56		15.7		

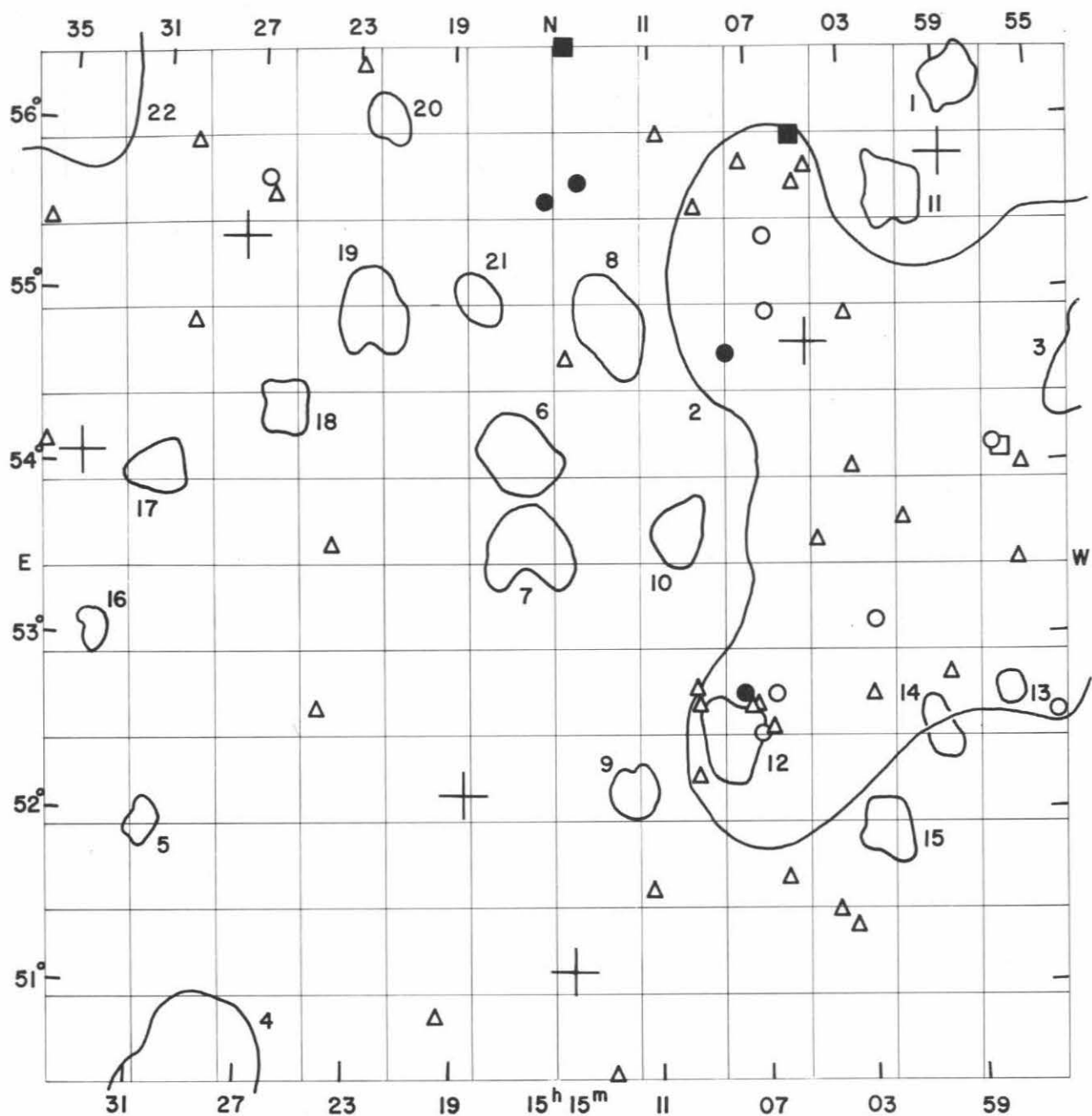
Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
14 37.0		+ 54 30		15.1		
14 37.1		+ 52 30		15.7		
14 37.2		+ 51 22		15.3		
14 39.1		+ 53 44		15.2		double system, tidal effect
14 42.3		+ 53 37	5751	13.9		
14 44.1		+ 50 38	1056*1057*	14.4		
14 44.1		+ 51 48		14.7		eruptive galaxy
14 45.0		+ 55 23		15.7		
14 49.0		+ 51 55		15.6		
14 49.2		+ 54 37	1069*	15.1		
14 50.4		+ 51 29	1074*	15.2		
14 50.8		+ 56 06	5779	15.7		
14 51.7		+ 52 15		15.6		
14 51.9		+ 52 17	5783=5785	14.0		
14 52.9		+ 53 25		15.5		
14 55.6		+ 52 32		14.6		
14 56.4		+ 53 59		15.3		diffuse spiral
14 56.8		+ 53 26		15.6		compact
14 57.1		+ 54 05	5820	13.0	+ 3269	$m_H = 12.8$ E
14 57.5		+ 54 07	5821	14.9		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5687	-	-	12.63	E3	12.8	E3	-	-
5820	-	-	13.03	S0	13.1	S0	-	-







FIELD No. 274

$15^{\text{h}}15^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 1096

# GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
20207	14	58	59.0	+	55	48 54	7.12
20332	15	04	50.9	+	54	44 53	5.21
20540	15	14	18.9	+	51	07 21	6.52
20641	15	18	36.8	+	52	08 16	5.52
20833	15	27	39.2	+	55	21 55	6.30
20977	15	33	56.7	+	54	05 13	6.03

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1453.0 + 5429	medium compact	121	3.5	MD	3
1457.3 + 5241	compact	42	0.9	ED	13
1457.5 + 5415	open	245	19.9	Near	2
1458.4 + 5613	medium compact	92	1.7	VD	1
1500.0 + 5228	compact	58	1.4	ED	14
1501.0 + 5536	medium compact	76	2.1	VD	11
1502.4 + 5155	medium compact	85	1.8	ED	15
1508.1 + 5227	compact	76	2.2	VD	12
1510.1 + 5339	medium compact	100	1.8	ED	10
1512.0 + 5209	medium compact	60	1.6	ED	9
1512.7 + 5451	medium compact	123	2.5	VD	8
1516.0 + 5336	medium compact	100	2.5	VD	7
1516.4 + 5406	medium compact	91	2.4	VD	6
1518.1 + 5501	compact	60	1.4	VD	21
1522.0 + 5604	compact	62	1.4	ED	20
1522.3 + 5456	medium compact	124	2.4	VD	19
1525.9 + 5422	compact	55	1.7	ED	18
1528.7 + 5019	open	126	5.4	MD	4
1530.9 + 5400	medium compact	57	1.8	ED	17
1531.0 + 5156	compact	42	1.2	ED	5
1533.1 + 5303	compact	56	1.0	ED	16
1540.3 + 5557	medium compact	401	13.0	MD	22

Average number of galaxies per cluster = 102.4

## GALAXIES

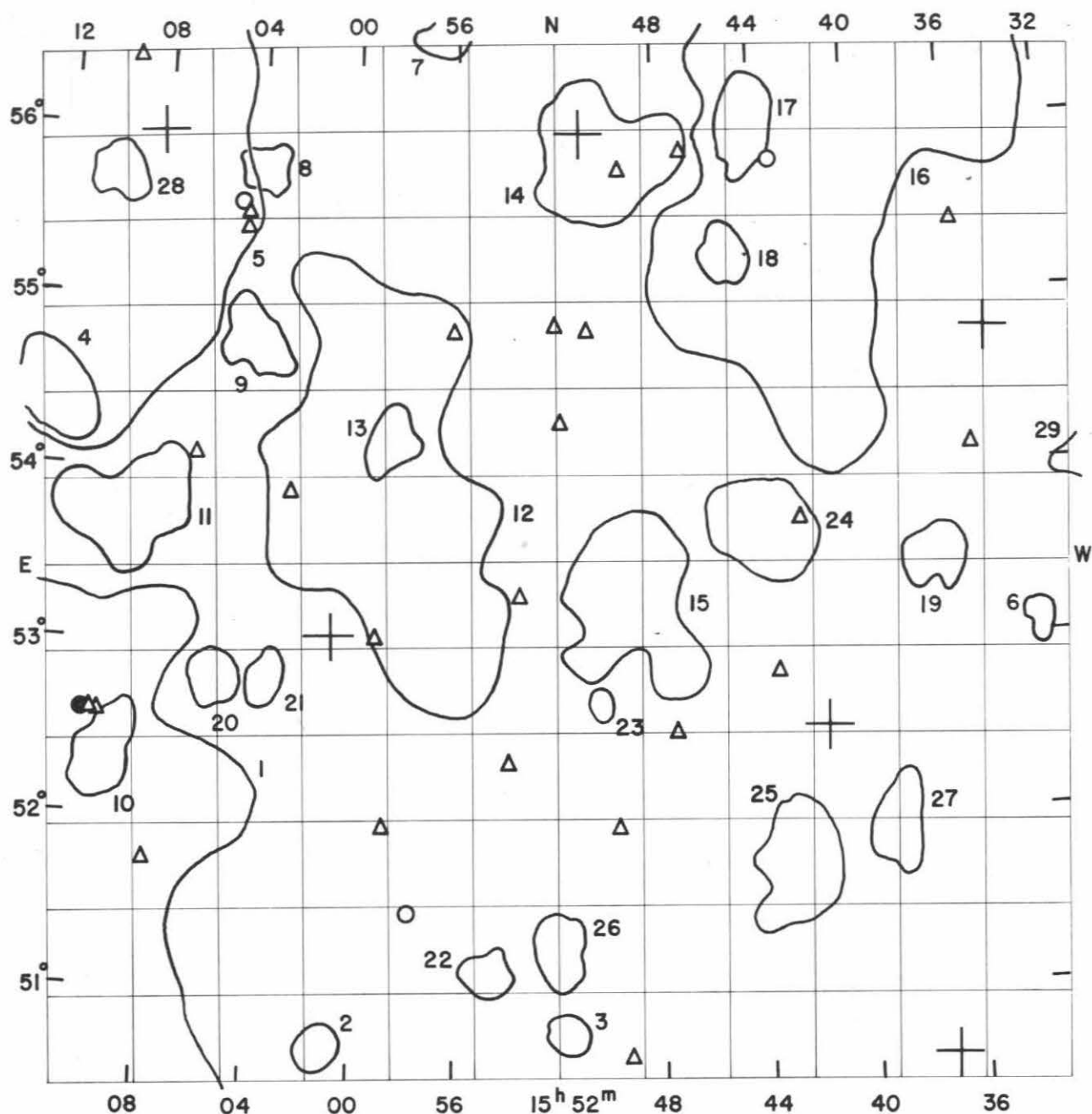
Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$				
h	m	o				
14	55.6	+ 52 32		14.6		
14	56.4	+ 53 59		15.3		diffuse spiral
14	56.8	+ 53 26		15.6		compact
14	57.1	+ 54 05	5820	13.0	+ 3269	$m_H = 12.8$ E
14	57.5	+ 54 07	5821	14.9		
14	59.6	+ 52 48		15.2		very diffuse
15	01.2	+ 53 43		15.5		double system, bridge + plume
15	02.5	+ 53 08		14.8		
15	02.7	+ 52 42		15.4		
15	03.1	+ 54 01		15.6		
15	03.2	+ 54 54		15.5		compact
15	03.6	+ 51 22		15.7		
15	04.2	+ 51 28		15.4		
15	04.6	+ 53 37		15.5		
15	04.6	+ 55 46	5862	15.7		compact
15	05.1	+ 55 57	5866	11.1	+ 795	$m_H = 11.5$ Sa
15	05.2	+ 55 40	5870	15.3		
15	06.1	+ 51 40		15.6		
15	06.4	+ 52 43		15.0		
15	06.4	+ 54 56	5874	14.1		
15	06.4	+ 55 22		14.7		
15	06.6	+ 52 31		15.3		
15	07.0	+ 52 29		14.1		
15	07.1	+ 52 39		15.5		compact
15	07.3	+ 55 47		15.6		compact
15	07.4	+ 52 38		15.7		

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
15 07.7		+ 52 44	5875	13.4		
15 08.0		+ 54 41	5876	13.9		
15 09.3		+ 55 32		15.4		
15 09.4		+ 52 39		15.3		
15 09.5		+ 52 15		15.2		
15 09.5		+ 52 45		15.6		
15 10.7		+ 55 59		15.7		very diffuse
15 11.3		+ 51 37		15.3		double system
15 12.8		+ 50 33	5902	15.4		star superposed
15 14.0		+ 55 42	5905	13.6		$m_H = 13.1$
15 14.6		+ 54 40	1111*	15.5		
15 14.6		+ 56 30	5906+5907	11.4	+ 538	$m_H = 11.8$ Sc
15 15.3		+ 55 35	5908	13.5		$m_H = 13.0$
15 19.6		+ 50 52		15.5		double system, tidal effects
15 23.0		+ 56 22		15.6		
15 23.9		+ 53 35		15.7		
15 24.4		+ 52 37		15.1		
15 26.5		+ 55 36		15.6		
15 26.8		+ 55 43		14.8		
15 29.7		+ 54 51		15.1		jet + plumes
15 29.9		+ 55 54		15.7		
15 35.4		+ 54 07		15.7		
15 35.8		+ 55 25		15.2		extremely compact

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5820	-	-	13.03	S0	13.1	S0	-	-
5866	-	-	10.89	S0	10.9	S0	-	-
5907	-	-	11.19	Sb	11.0	Sb	11.04	Sb+





FIELD No. 275

$15^{\text{h}}52^{\text{m}} + 53^{\circ}30'$

Survey Plate No. 1413

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
20999	15	34	39.8	+	54	47 41	5.74
21054	15	37	06.5	+	50	35 07	5.94
21154	15	41	29.0	+	52	31 04	5.48
21345	15	51	06.6	+	55	58 25	5.92
21569	16	00	48.8	+	53	03 14	6.18
21756	16	08	19.7	+	55	57 30	6.59

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1530.9 + 5400	medium compact	57	1.8	ED	29
1533.1 + 5303	compact	56	1.0	ED	6
1537.0 + 5328	medium compact	102	2.0	VD	19
1539.0 + 5155	medium compact	106	2.2	VD	27
1540.3 + 5557	medium compact	401	13.0	MD	16
1542.8 + 5142	medium compact	95	3.4	D	25
1543.9 + 5340	medium compact	93	3.4	VD	24
1544.1 + 5600	medium compact	117	2.3	D	17
1545.0 + 5515	medium compact	78	1.6	ED	18
1549.0 + 5315	medium compact	140	4.7	MD	15
1550.2 + 5550	medium compact	121	4.4	VD	14
1550.3 + 5239	compact	56	0.8	ED	23
1551.5 + 5044	medium compact	81	1.3	ED	3
1551.9 + 5114	compact	119	2.0	ED	26
1554.8 + 5106	medium compact	87	1.5	ED	22
1556.6 + 5635	medium compact	83	1.6	ED	7
1558.6 + 5410	compact	77	1.7	ED	13
1559.0 + 5353	compact	281	9.4	Near	12
1601.0 + 5039	medium compact	88	1.4	ED	2
1603.4 + 5247	medium compact	65	1.5	ED	21
1604.0 + 5544	compact	81	1.6	VD	8
1604.1 + 5445	compact	230	2.1	ED	9
1605.4 + 5247	medium compact	96	1.6	VD	20
1609.0 + 5345	medium compact	100	3.6	MD	11
1609.6 + 5219	medium compact	85	2.3	D	10
1610.0 + 5543	medium compact	80	1.7	VD	28
1610.3 + 4955	open	675	26.7	Near	1
1612.1 + 5425	medium compact	107	2.8	VD	4
1613.8 + 5632	open	393	19.7	Near	5

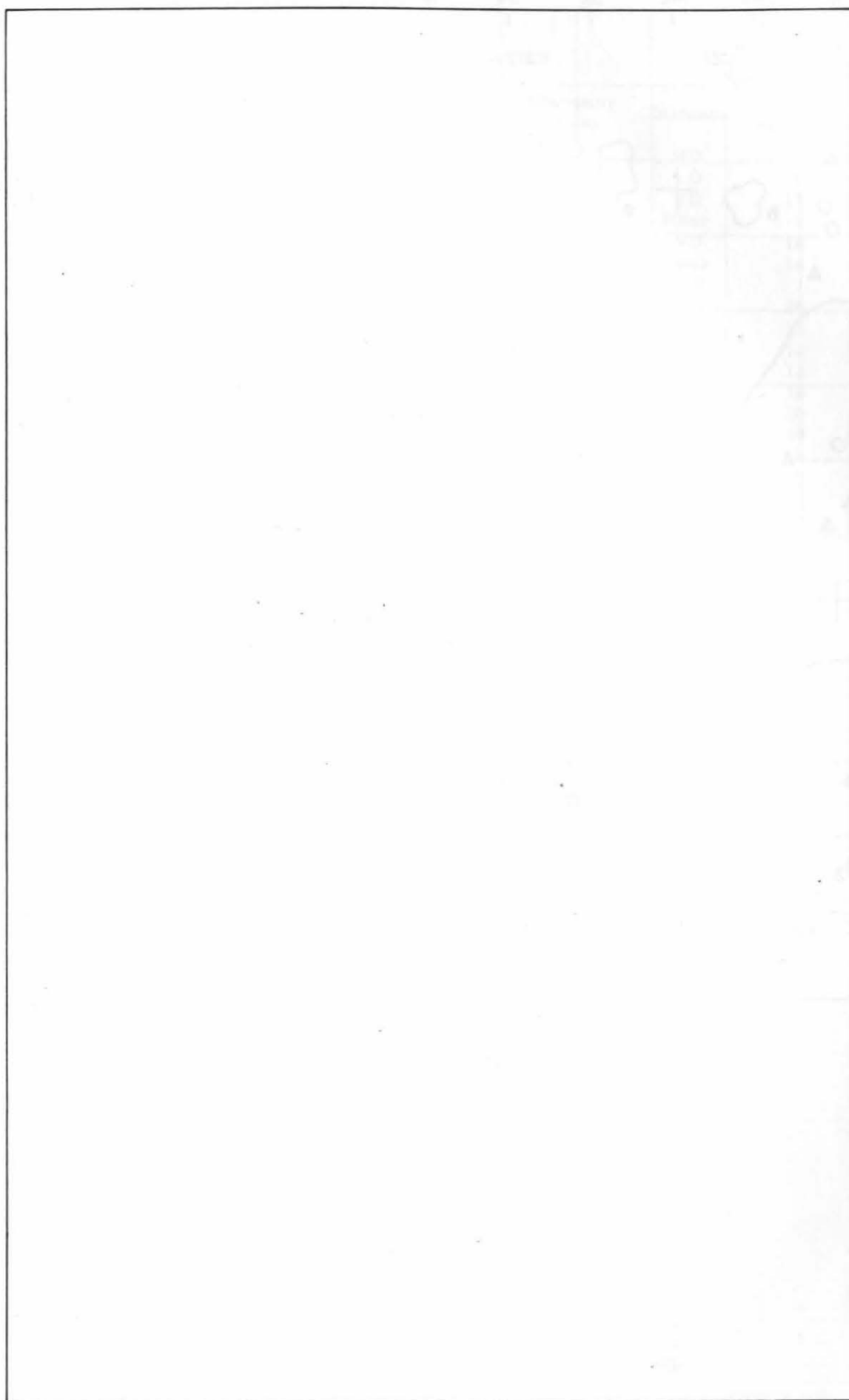
Average number of galaxies per cluster = 143.1

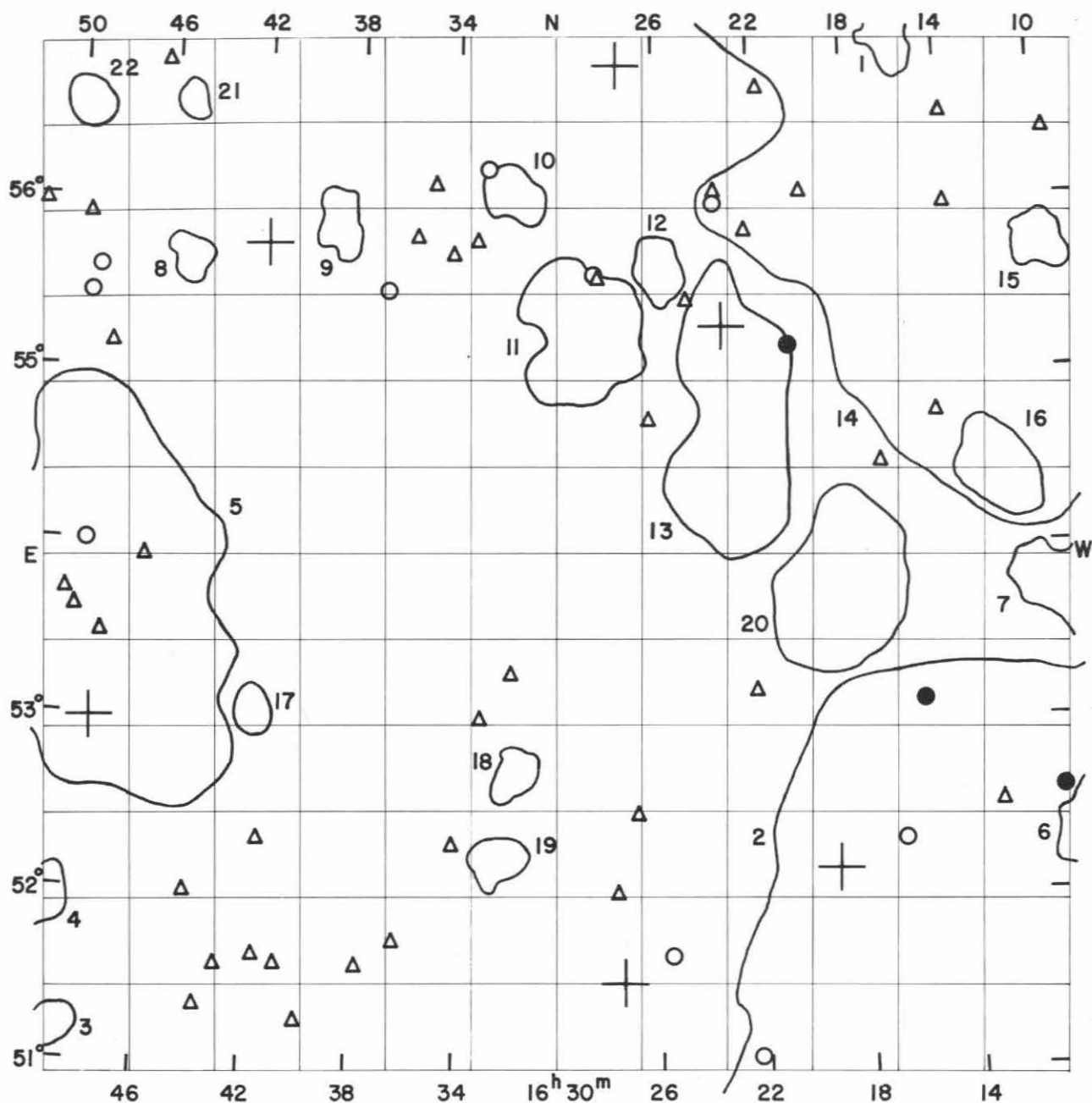
## GALAXIES

Position a 1950 $\delta$ h m o	NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
15 35.4 + 54 07		15.7		
15 35.8 + 55 25		15.2		extremely compact
15 42.3 + 53 44		15.3		
15 43.2 + 55 49		14.9		
15 43.4 + 52 51		15.5		
15 46.9 + 55 52		15.1		twisted streamers
15 47.4 + 52 30		15.6		
15 49.3 + 50 38		15.1		
15 49.5 + 55 46		15.4		
15 49.7 + 51 57		15.4		
15 50.8 + 54 49		15.6		
15 51.9 + 54 18		15.7		
15 52.0 + 54 52		15.4		compact
15 53.5 + 53 18		15.7		
15 53.9 + 52 20		15.3		
15 56.1 + 54 49		15.6		
15 57.7 + 51 28		15.0		
15 58.8 + 51 58		15.7		ring shaped halo
15 59.1 + 53 03		15.2		

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
16	02.6	+ 53 53		15.6		
16	04.6	+ 55 30		15.5		compact
16	04.7	+ 55 24		15.7		
16	05.0	+ 55 33		15.0		very long, extended arm
16	06.5	+ 54 06		15.6		
16	07.8	+ 51 45		15.7		
16	09.5	+ 56 23		15.6		
16	09.8	+ 52 34		15.7		very faint streamers
16	10.1	+ 52 35		15.5		
16	10.4	+ 52 35	6090	14.0		double system, halo + plumes







FIELD No. 276  
 $16^{\text{h}}30^{\text{m}} + 54^{\circ}00'$   
 Survey Plate No. 1101

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
22003	16	19	08.4	+	52	09 25	6.67
22102	16	23	19.5	+	55	19 05	5.66
22185	16	27	26.7	+	51	30 58	6.37
22186	16	27	31.9	+	56	50 38	9.0
22521	16	41	56.9	+	55	46 53	6.18
22672	16	48	14.0	+	53	00 07	7.13

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1609.0 + 5345	medium compact	100	3.6	MD	7
1609.6 + 5219	medium compact	85	2.3	D	6
1610.0 + 5543	medium compact	80	1.7	VD	15
1610.3 + 4955	open	675	26.7	Near	2
1612.1 + 5425	medium compact	107	2.8	VD	16
1613.8 + 5632	open	393	19.7	Near	14
1615.7 + 5700	medium compact	107	2.1	VD	1
1618.5 + 5346	medium compact	114	4.8	MD	20
1622.8 + 5443	medium compact	154	5.8	D	13
1625.8 + 5538	compact	76	1.7	VD	12
1629.0 + 5516	medium compact	108	4.2	D	11
1631.6 + 5243	compact	83	1.5	ED	18
1631.8 + 5605	medium compact	59	1.7	VD	10
1632.3 + 5213	medium compact	75	1.6	ED	19
1639.0 + 5553	medium compact	94	1.6	ED	9
1641.9 + 5303	compact	72	1.4	ED	17
1645.1 + 5540	compact	82	1.4	ED	8
1645.6 + 5634	medium compact	76	1.1	ED	21
1647.6 + 5337	medium compact	157	10.0	Near	5
1648.9 + 5110	compact	86	1.2	ED	3
1650.0 + 5155	medium compact	126	2.1	VD	4
1650.0 + 5633	compact	88	1.5	VD	22

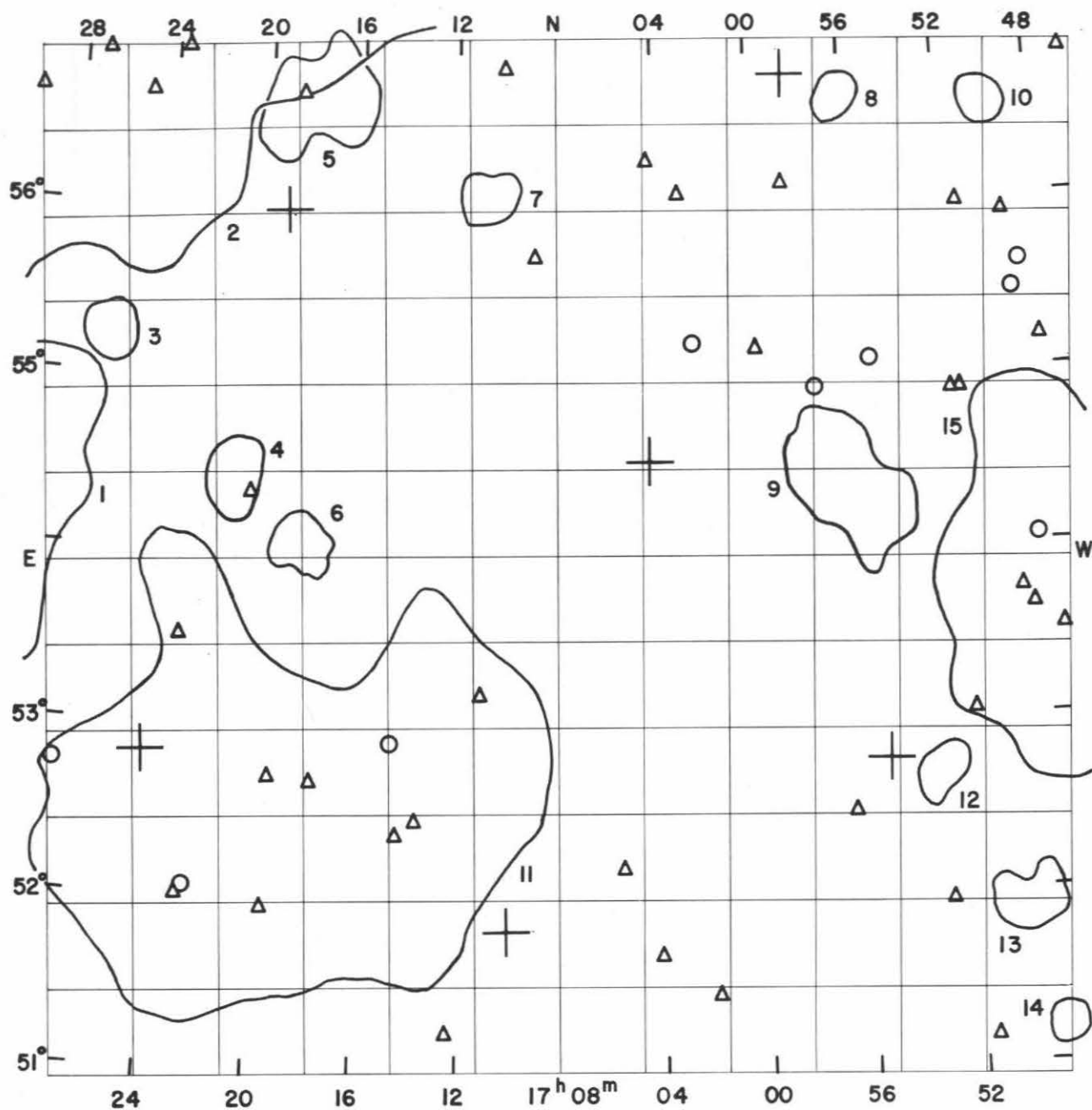
Average number of galaxies per cluster = 136.2

## GALAXIES

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
16	09.5	+ 56 23		15.6		
16	10.4	+ 52 35	6090	14.0		double system, halo + plumes
16	12.8	+ 52 32		15.5		
16	13.8	+ 56 00		15.2		
16	13.8	+ 56 31		15.6		double system
16	14.5	+ 54 47		15.1		compact
16	15.6	+ 53 08	1211*	13.8		compact
16	16.5	+ 52 20		15.0		
16	16.9	+ 54 31		15.5		diffuse
16	19.8	+ 56 05	6136	15.5		
16	20.5	+ 55 12	6143	13.9		
16	21.5	+ 56 42		15.5		
16	22.1	+ 53 13		15.7		
16	22.1	+ 55 52		15.6		diffuse
16	22.3	+ 51 06		14.6		
16	23.4	+ 56 01		15.0		very compact
16	23.4	+ 56 06		15.7		
16	24.7	+ 55 28	6157	15.5		
16	25.6	+ 51 41		14.7		
16	26.3	+ 54 47		15.3		
16	26.8	+ 52 30		15.5		double system
16	27.7	+ 52 03		15.7		
16	28.4	+ 55 35		15.7		
16	28.5	+ 55 37	6182	14.6		
16	31.8	+ 53 18		15.3		
16	32.8	+ 56 13		15.0		

Position			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$ h m	1950	$\delta$ ° ' "				
16 33.0		+ 53 03		15.1		
16 33.2		+ 55 49		15.7		
16 34.0		+ 52 20		15.6		very compact
16 34.1		+ 55 44		15.5		double system, contact
16 35.0		+ 56 08		15.5		
16 35.7		+ 55 50		15.2		
16 36.3		+ 51 46		15.7		
16 36.9		+ 55 31		14.9		compact
16 37.7		+ 51 38		15.4		compact
16 40.0		+ 51 18		15.2		
16 40.8		+ 51 38		15.6		very compact
16 41.6		+ 51 40		15.4		compact
16 41.6		+ 52 20		15.7		
16 43.0		+ 51 37		15.7		
16 43.8		+ 51 22	1230*	15.5		quadruple system
16 44.4		+ 52 01		15.6		
16 46.4		+ 53 57		15.7		
16 46.5		+ 56 50		15.4		compact
16 48.0		+ 53 31		15.5		brightest in chain of 6
16 48.1		+ 55 11		15.6		
16 48.8		+ 54 02		14.4		
16 48.9		+ 55 38	6246	14.2		
16 49.1		+ 53 39		15.5		
16 49.2		+ 55 28		14.7		
16 49.4		+ 55 55		15.4		
16 49.6		+ 53 45		15.4		
16 51.3		+ 55 59		15.2		





FIELD No. 277  
 $17^{\text{h}}08^{\text{m}} + 54^{\circ}00'$   
 Survey Plate No. 765

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
22859	16	55	08.9	+	52	46 31	7.08
22938	16	58	26.3	+	56	45 40	6.11
23092	17	04	17.4	+	54	32 08	5.06
23221	17	10	06.7	+	51	48 48	7.03
23460	17	19	09.3	+	55	59 02	7.88
23634	17	24	17.8	+	52	50 01	6.56

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1647.6 + 5337	medium compact	157	10.0	Near	15
1648.9 + 5110	compact	86	1.2	ED	14
1650.0 + 5155	medium compact	126	2.1	VD	13
1650.0 + 5633	compact	88	1.5	VD	10
1653.1 + 5240	compact	76	1.6	ED	12
1656.0 + 5637	medium compact	94	1.4	ED	8
1656.1 + 5421	medium compact	164	4.0	D	9
1710.7 + 5603	medium compact	102	1.8	ED	7
1717.9 + 5636	medium compact	130	3.5	D	5
1718.2 + 5403	medium compact	108	2.0	ED	6
1718.6 + 5229	open	230	14.1	Near	11
1721.0 + 5425	medium compact	142	2.2	ED	4
1726.4 + 5515	medium compact	123	1.8	ED	3
1730.4 + 5829	open	417	26.0	Near	2
1731.6 + 5348	medium compact	199	8.6	MD	1

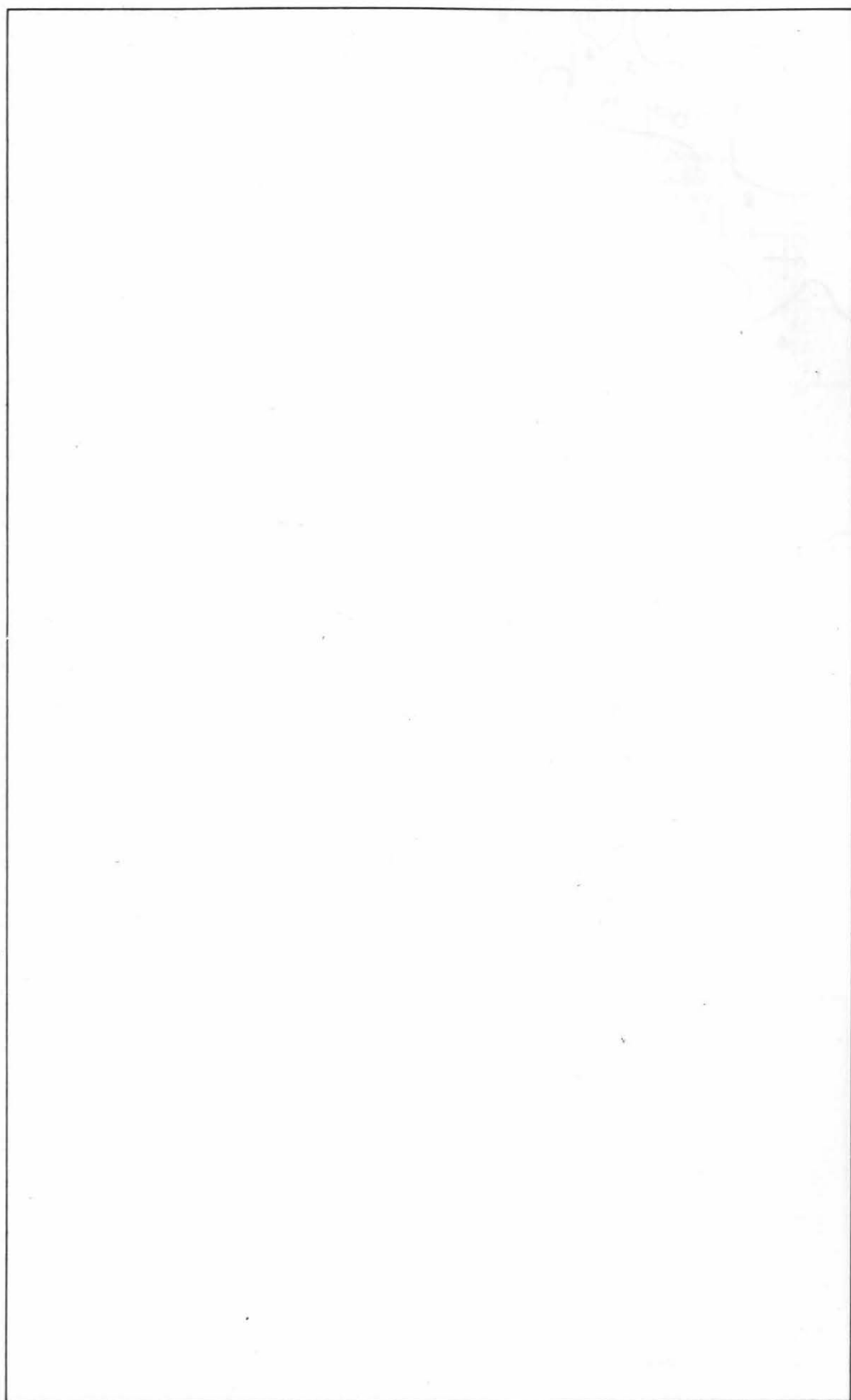
Average number of galaxies per cluster = 149.5

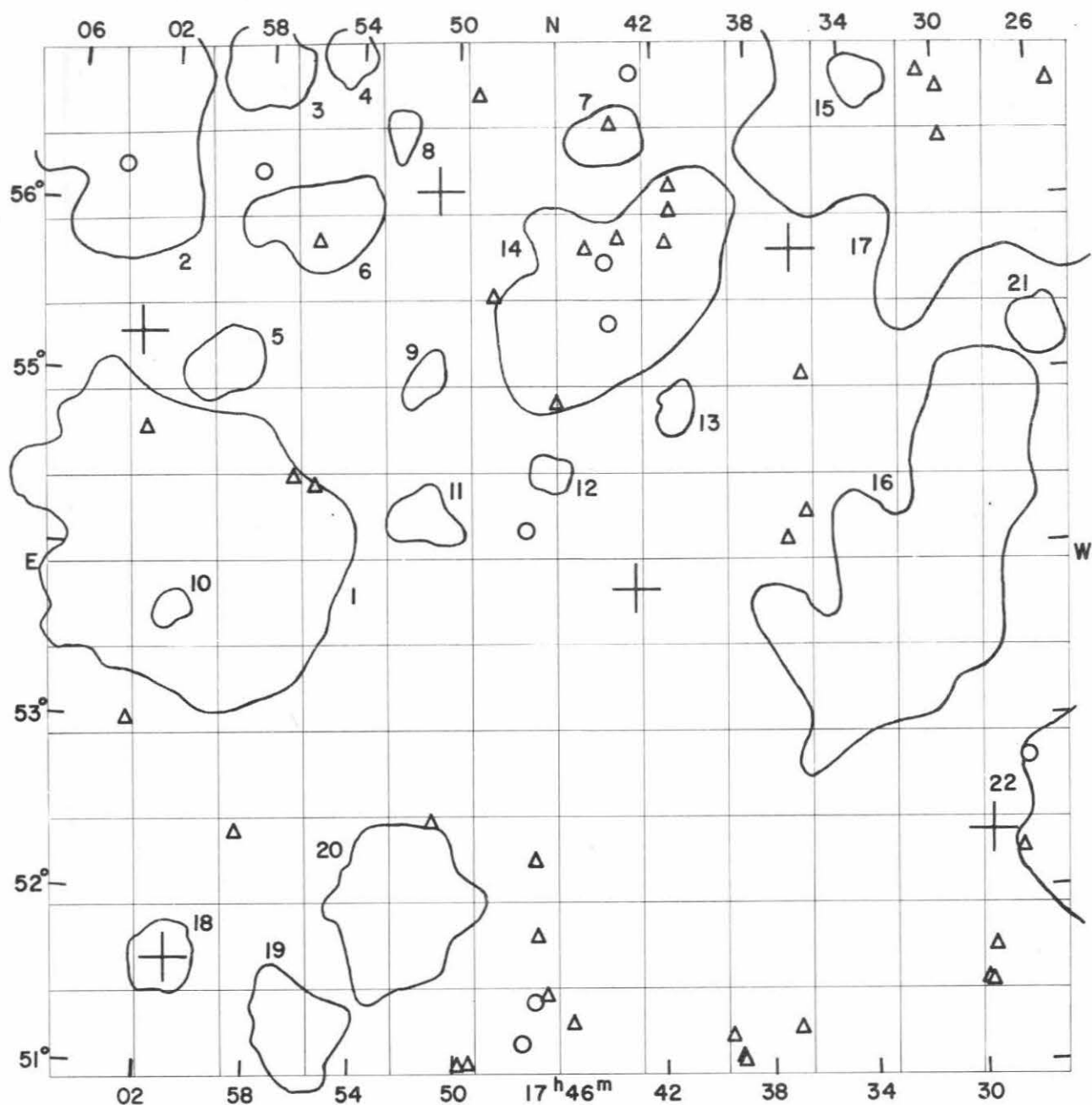
## GALAXIES

Position				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ					
h	m	o	i				
16	46.5	+ 56	50		15.4		compact
16	48.0	+ 53	31		15.5		brightest in chain of 6
16	48.1	+ 55	11		15.6		
16	48.8	+ 54	02		14.4		
16	48.9	+ 55	38	6246	14.2		
16	49.1	+ 53	39		15.5		
16	49.2	+ 55	28		14.7		
16	49.4	+ 55	55		15.4		
16	49.6	+ 53	45		15.4		
16	51.3	+ 55	59		15.2		
16	51.5	+ 51	10		15.3		
16	51.6	+ 54	55		15.7		
16	51.7	+ 53	03		15.6		
16	52.0	+ 54	55		15.2		
16	52.9	+ 51	58		15.4		
16	55.2	+ 55	06	1237*	14.7		
16	56.5	+ 52	29		15.5		
16	57.5	+ 54	56		14.8		
16	58.6	+ 56	08		15.4		
16	59.8	+ 55	10		15.5		
17	02.0	+ 51	28		15.3		
17	02.5	+ 55	13		14.9		
17	03.0	+ 56	05		15.7		
17	04.0	+ 51	41		15.6		compact
17	04.2	+ 56	16		15.6		
17	05.5	+ 52	12		15.5		compact
17	08.9	+ 55	43		15.5		
17	10.1	+ 56	48		15.6		
17	11.1	+ 53	11		15.3		
17	12.4	+ 51	15		15.7		
17	13.6	+ 52	27		15.5		
17	14.4	+ 52	22		15.7		diffuse spiral
17	14.7	+ 52	54		14.7		

Position				NGC IC*	$m_p$	$V_s$ km/sec	Remarks
$\alpha$	1950	$\delta$					
h	m	o	'				
17	17.8	+	52 40	6358	15.1		
17	18.7	+	56 40		15.7		
17	19.4	+	52 42		15.5		
17	19.5	+	51 57		15.4		
17	20.4	+	54 20		15.7		
17	22.6	+	52 04		14.8		
17	22.9	+	52 00		15.5		
17	23.1	+	53 30		15.7		double system in faint halo
17	23.6	+	56 56		15.5		
17	25.1	+	56 40		15.6		extremely compact
17	27.0	+	56 54	6382	15.2		
17	27.7	+	52 46	6386	14.9		
17	29.8	+	56 40		15.6		







FIELD No. 278

$17^{\text{h}}46^{\text{m}} + 54^{\circ}00'$

Survey Plate No. 1102

#### GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
23741	17	29	18.1	+	52	20 15	2.99
23914	17	36	18.5	+	55	46 06	7.18
24093	17	42	56.5	+	53	49 19	5.70
24322	17	50	50.3	+	56	07 50	7.06
24585	18	01	07.4	+	51	38 15	7.24
24645	18	03	03.4	+	55	16 13	7.61

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1718.6 + 5229	open	230	14.1	Near	22
1726.4 + 5515	medium compact	123	1.8	ED	21
1730.4 + 5829	open	417	26.0	Near	17
1731.6 + 5348	medium compact	199	8.6	MD	16
1733.2 + 5644	medium compact	100	1.6	ED	15
1741.1 + 5450	medium compact	86	1.3	ED	13
1743.8 + 5528	open	128	6.8	Near	14
1744.0 + 5625	compact	132	2.1	ED	7
1746.2 + 5429	medium compact	85	1.2	ED	12
1751.4 + 5414	medium compact	66	2.0	VD	11
1751.5 + 5501	compact	96	1.4	ED	9
1752.0 + 5158	medium compact	115	4.8	D	20
1752.5 + 5627	compact	79	1.2	ED	8
1754.7 + 5654	compact	110	1.6	ED	4
1755.9 + 5556	medium compact	121	3.4	VD	6
1756.0 + 5114	medium compact	80	3.0	VD	19
1758.4 + 5649	compact	138	2.7	ED	3
1759.7 + 5504	compact	143	2.3	VD	5
1800.9 + 5401	medium compact	297	9.9	D	1
1801.2 + 5136	compact	128	2.1	ED	18
1801.4 + 5339	medium compact	74	1.1	ED	10
1807.2 + 5633	medium compact	130	8.6	Near	2

Average number of galaxies per cluster = 139.9

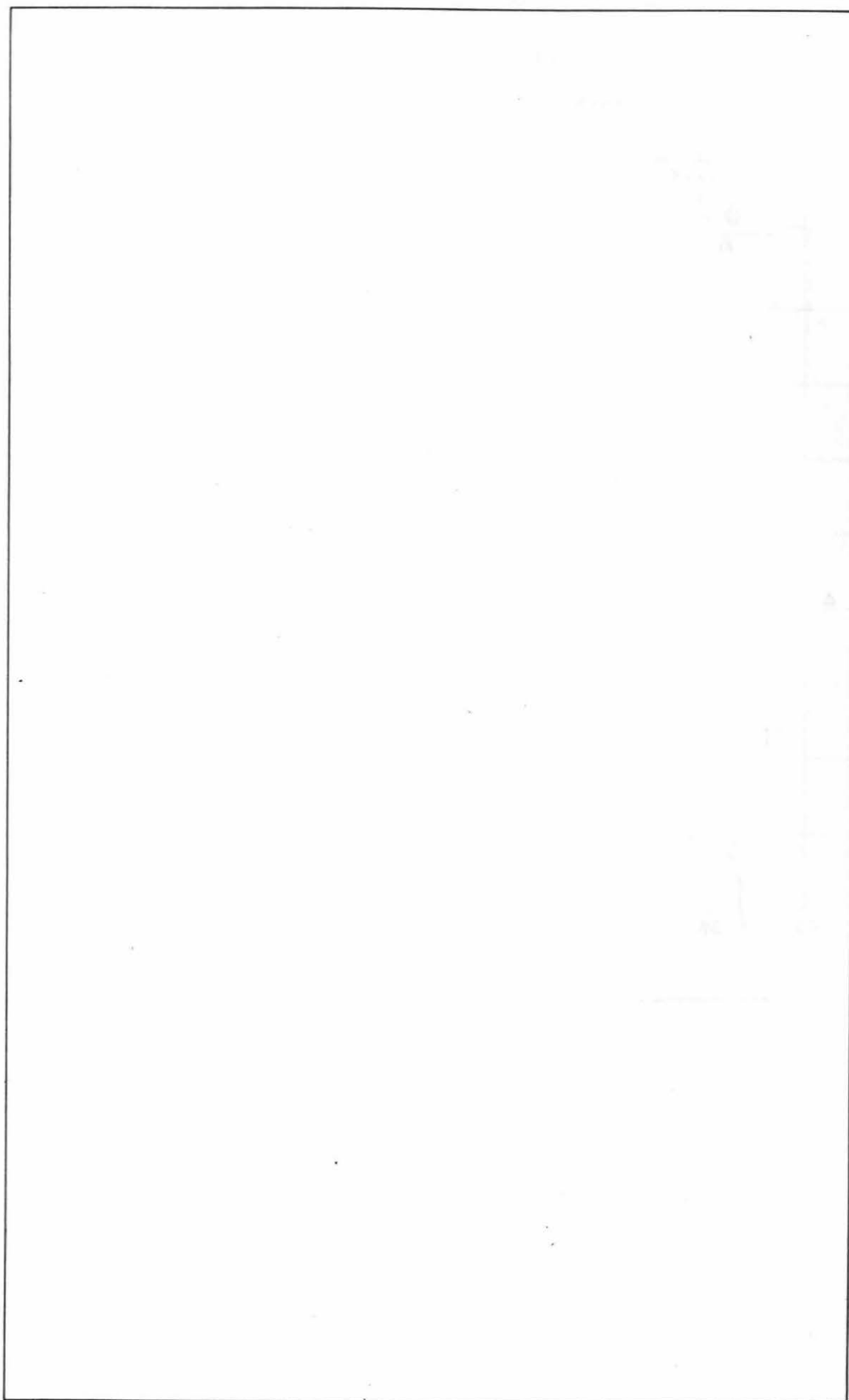
## GALAXIES

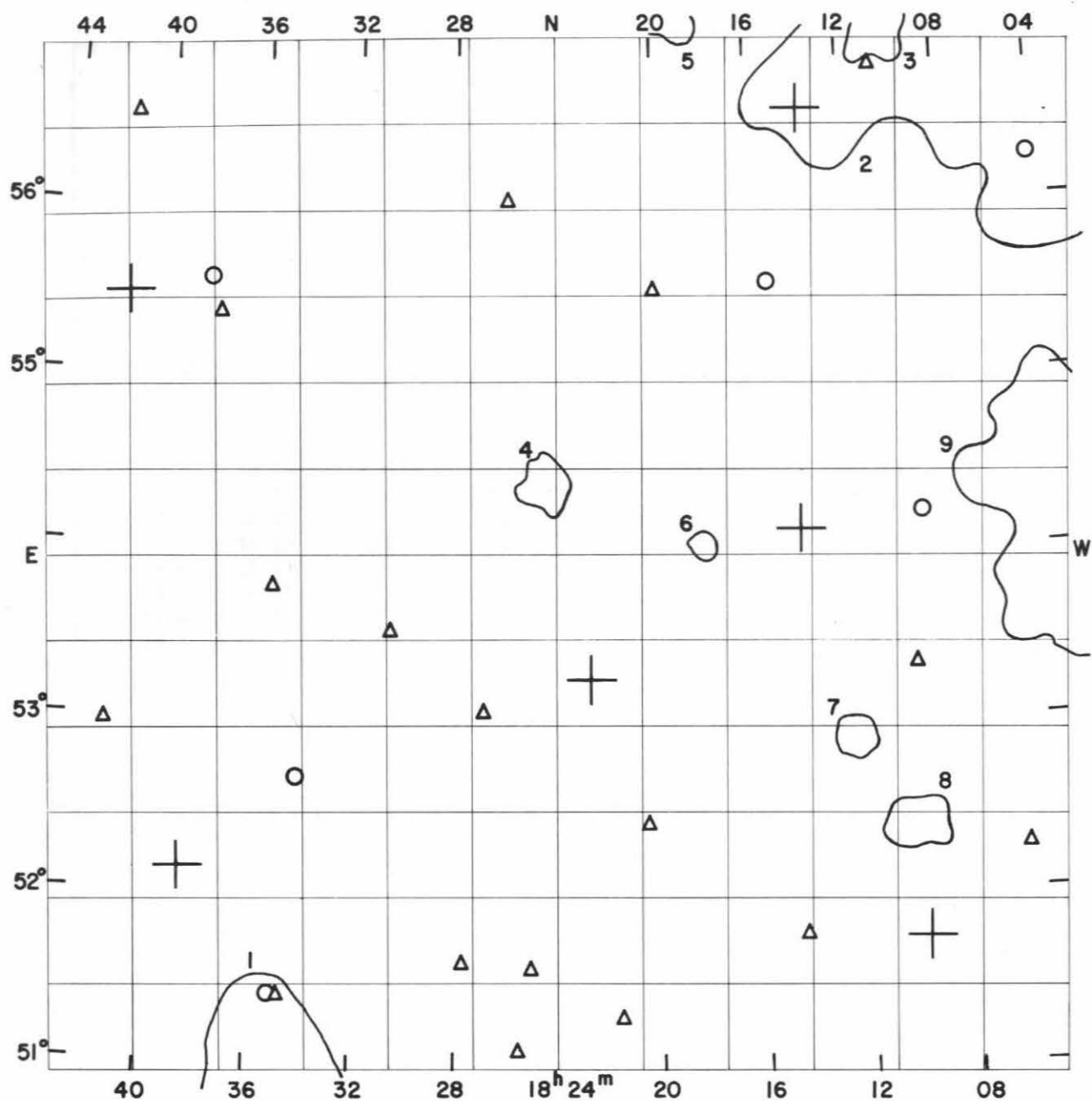
Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
17	25.1	+ 56 40	6386	15.6		extremely compact
17	27.7	+ 52 46		14.9		
17	28.1	+ 52 15		15.2		
17	29.4	+ 51 41		15.7		
17	29.6	+ 51 29		15.5		very compact
17	29.7	+ 51 30		15.1		
17	29.8	+ 56 23		15.4		
17	29.8	+ 56 40		15.6		
17	30.5	+ 56 46		15.5		
17	36.0	+ 54 15		15.4		double system
17	36.0	+ 55 02	6449	15.3		
17	36.8	+ 51 16		15.7		very compact
17	36.8	+ 54 05		15.7		
17	39.0	+ 51 04		15.7		
17	39.0	+ 51 06		15.4		
17	39.4	+ 51 14		15.4		
17	41.2	+ 56 10		15.6		very diffuse spiral
17	41.3	+ 56 00		15.6		diffuse spiral
17	41.5	+ 55 50		15.7		
17	42.9	+ 56 49		14.6		
17	43.5	+ 55 51	6454	15.4		
17	43.8	+ 56 30		15.3		
17	43.9	+ 55 21		15.0		
17	44.0	+ 55 43		14.6		
17	44.9	+ 55 47		15.3		
17	45.5	+ 51 20		15.1		

Position a 1950 $\delta$				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	i				
17	46.0	+ 54	54		15.1		
17	46.4	+ 51	28		15.7		
17	46.8	+ 51	49		15.6		
17	47.0	+ 51	26	6466	15.0		
17	47.0	+ 52	15		15.5		
17	47.3	+ 54	10	6479	14.5		
17	47.5	+ 51	12	6478	14.1	+ 6857	
17	48.6	+ 55	31		15.3		
17	49.2	+ 56	41		15.2		double system, connected
17	49.4	+ 51	04		15.6		
17	49.8	+ 51	03		15.5		compact
17	51.0	+ 52	28		15.4		
17	55.9	+ 54	24		15.3		compact
17	55.9	+ 55	49		15.5		
17	56.7	+ 54	27		15.5		
17	58.3	+ 56	13	6532	15.0		
17	58.6	+ 52	23		15.2		
18	02.6	+ 54	42		15.6		
18	03.0	+ 53	01		15.7		
18	04.1	+ 56	15	6562	14.7		compact

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956	Holmberg 1958	
6478	-	-	-	-	-	Sc	-





FIELD No. 279  
 $18^{\text{h}}24^{\text{m}} + 54^{\circ}00'$   
 Survey Plate No. 789

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
24827	18	09	52.2	+	51	43 37	7.21
24927	18	13	48.4	+	56	34 14	6.41
24943	18	14	14.3	+	54	07 27	6.79
25145	18	22	43.1	+	53	16 21	6.21
25559	18	38	43.8	+	52	08 54	5.85
25635	18	41	39.8	+	55	29 17	5.08

## CLUSTERS OF GALAXIES

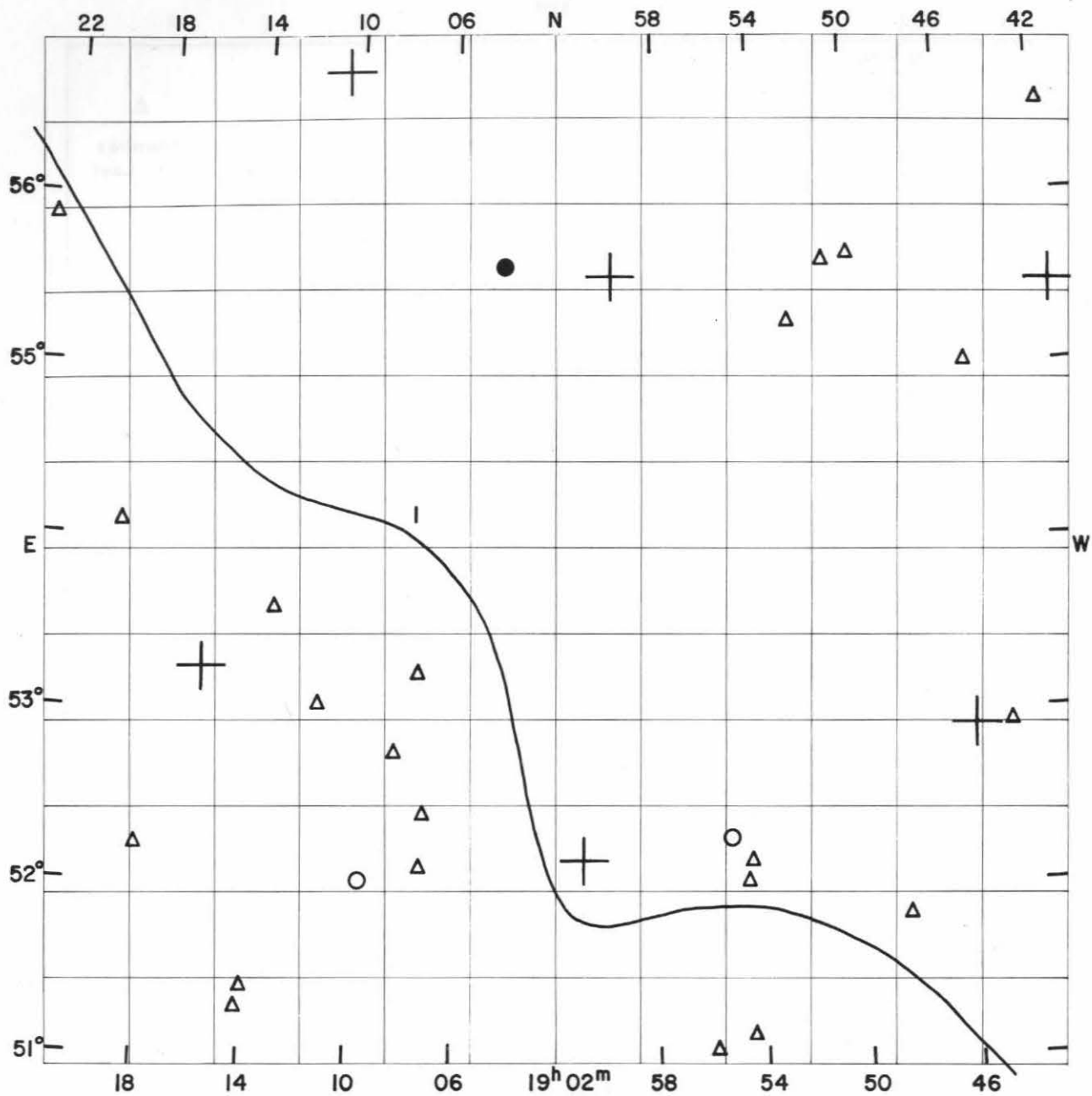
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1800.9 + 5401	medium compact	297	9.9	D	9
1807.2 + 5633	medium compact	130	8.6	Near	2
1810.1 + 5223	medium compact	86	1.8	D	8
1810.3 + 5659	medium compact	64	2.0	VD	3
1812.4 + 5254	compact	61	1.3	ED	7
1818.2 + 5401	compact	55	0.8	ED	6
1818.9 + 5705	medium compact	90	1.4	VD	5
1824.5 + 5423	compact	144	1.6	ED	4
1916.8 + 4855	medium compact	3755	73.7	Near	1 *

Average number of galaxies per cluster = 520.2

\*) see special map on page 386

## GALAXIES

Position a 1950 $\delta$ h    m    o			NGC IC *	$m_p$	$V_s$ km/sec	Remarks
18 04.1	+ 56	15	6562	14.7		compact
18 05.8	+ 52	16	6566	15.5		compact, halo
18 09.4	+ 54	13		14.9		
18 09.8	+ 53	20		15.6		
18 10.7	+ 56	47		15.7		
18 14.5	+ 51	46		15.3		
18 15.3	+ 55	33	1286 *	14.8		
18 20.0	+ 55	31		15.6		
18 20.5	+ 52	20		15.4		
18 21.6	+ 51	19		15.3		
18 25.1	+ 51	35		15.7		
18 25.6	+ 51	07		15.2		
18 26.1	+ 56	02		15.4		
18 26.9	+ 53	05		15.5		double system
18 27.7	+ 51	37		15.6		
18 30.6	+ 53	32		15.7		compact
18 34.2	+ 52	41		14.3		compact, faint jet
18 34.8	+ 51	25		15.7		
18 35.2	+ 51	26		14.9		
18 35.3	+ 53	47		15.3		
18 37.9	+ 55	22		15.6		
18 38.3	+ 55	35	6691	14.1		
18 41.6	+ 56	32		15.7		
18 41.8	+ 52	59		15.5		diffuse



FIELD No. 280  
 $19^{\text{h}}02^{\text{m}} + 54^{\circ}00'$   
 Survey Plate No. 542

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	o	'	"	
25635	18	41	39.8	+	55	29 17	5.08
25757	18	45	36.0	+	52	55 56	5.76
26169	18	59	44.0	+	55	35 10	5.52
26202	19	00	56.4	+	52	11 15	6.42
26475	19	10	43.8	+	56	46 24	5.24
26621	19	15	56.8	+	53	16 32	3.98



## CLUSTERS OF GALAXIES

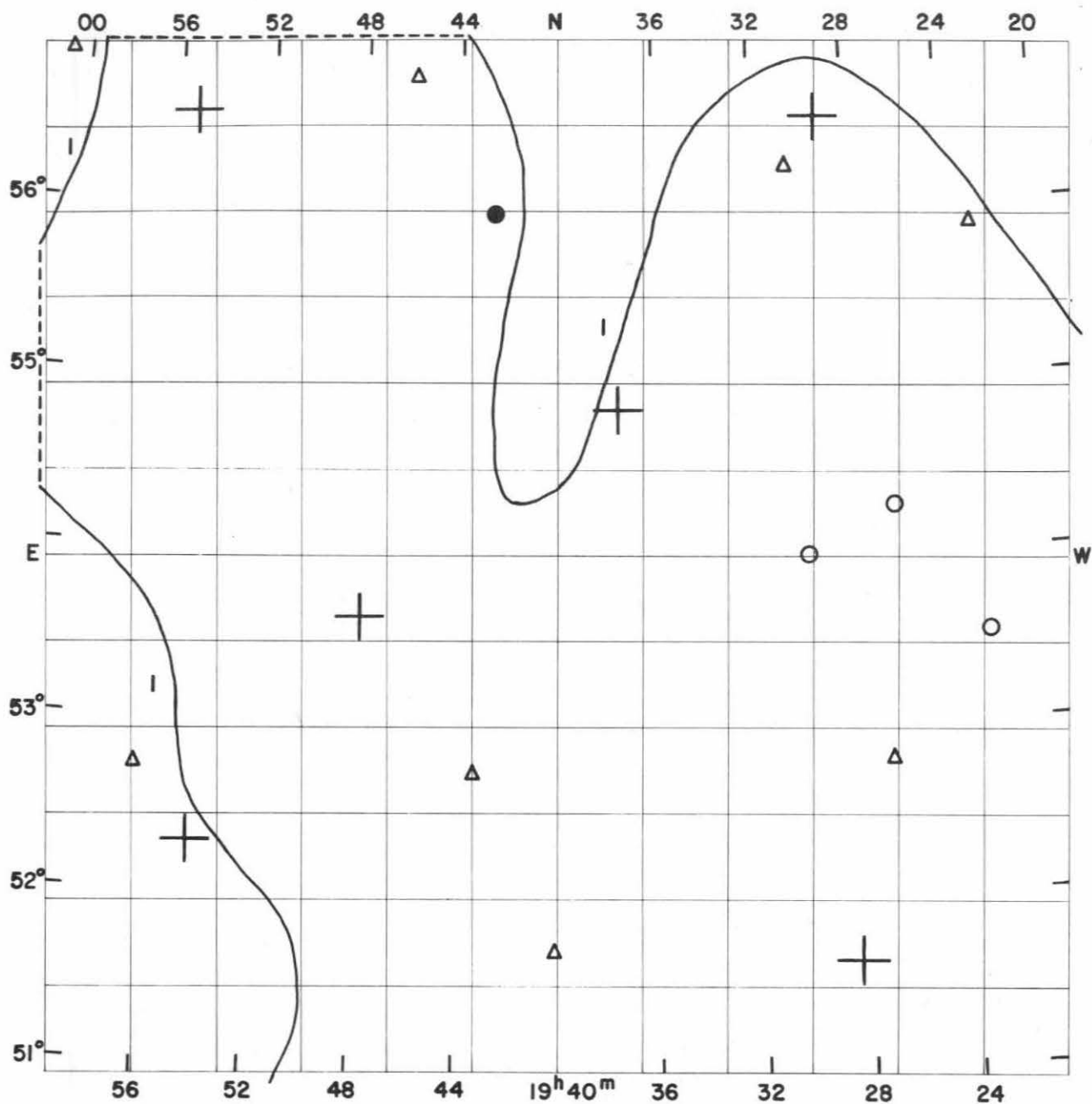
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1 *

Average number of galaxies per cluster = 3755.0

\*) see special map on page 386

## GALAXIES

Position a 1950 $\delta$			NGC IC*	$m_p$	$V_s$ km/sec	Remarks
h	m	o				
18	41.6	+ 56 32		15.7		
18	44.1	+ 52 56		15.6		
18	45.2	+ 55 02		15.6		diffuse
18	48.4	+ 51 50		15.7		very diffuse
18	49.9	+ 55 42		15.7		double system
18	51.0	+ 55 40		15.2		
18	52.5	+ 55 18		15.5		
18	54.4	+ 52 11		15.7		double system
18	54.5	+ 51 11		15.7		compact
18	54.5	+ 52 05		15.5		system with jet
18	55.2	+ 52 18	6732	14.4		double system
18	56.0	+ 51 05		15.6		
19	04.1	+ 55 39	6757	14.0		
19	07.2	+ 52 28		15.4		compact
19	07.3	+ 52 10		15.5		
19	07.4	+ 53 17		15.2		
19	08.3	+ 52 50		15.5		compact
19	09.6	+ 52 05		14.6		
19	11.3	+ 53 06		15.6		
19	13.2	+ 53 40		15.6		
19	14.0	+ 51 27		15.4		
19	14.2	+ 51 19		15.7		
19	18.2	+ 52 15		15.3		
19	19.4	+ 54 07		15.3		
19	22.8	+ 55 53		15.1		



FIELD No. 281  
 $19^{\text{h}}40^{\text{m}} + 54^{\circ}00'$   
 Survey Plate No. 774

GC STARS

Nos.	R.A.			Decl.			$m_p$
	h	m	s	°	'	"	
26947	19	28	26.7	+	51	37 21	3.94
26963	19	29	12.5	+	56	32 18	6.78
27206	19	37	33.8	+	54	51 21	5.86
27456	19	47	51.1	+	53	38 25	6.85
27618	19	54	20.2	+	52	18 20	4.9
27641	19	55	13.8	+	56	33 07	6.10

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1 *

Average number of galaxies per cluster = 3755.0

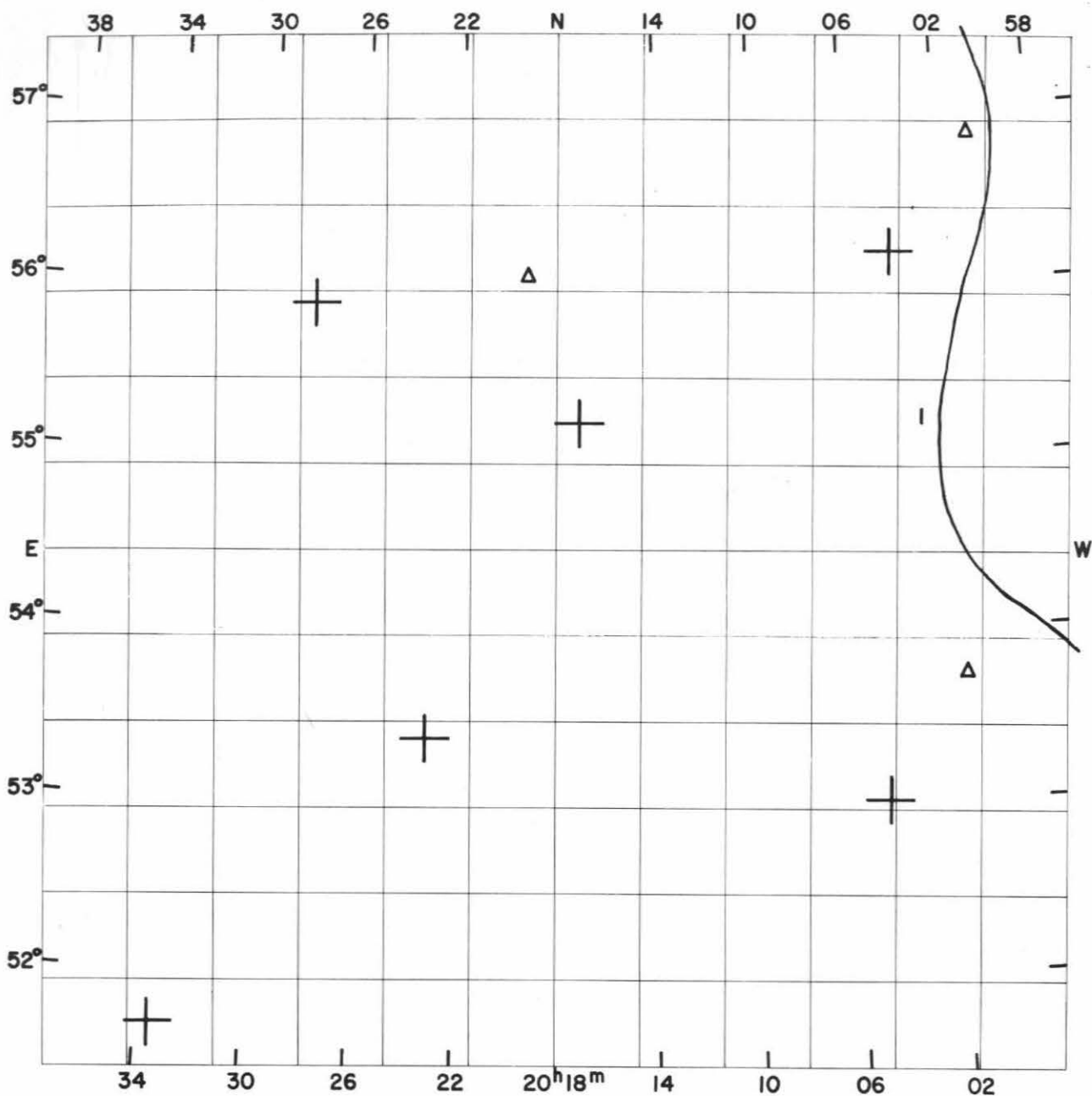
\*) see special map on page 386

## GALAXIES

Position a 1950    δ				NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
h	m	o	'				
19	22.8	+	53 32	6798	14.5		
19	22.8	+	55 53		15.1		
19	26.5	+	54 16	6801	14.8		
19	26.9	+	52 47		15.3		
19	29.9	+	54 00		14.4		double system
19	30.5	+	56 15		15.7		bright star superposed
19	40.0	+	51 43		15.2		
19	42.6	+	55 59	6824	13.1	+ 3386	
19	43.3	+	52 45		15.5		compact
19	46.0	+	56 47		15.4		
19	56.5	+	52 44		15.3		compact in extended halo
20	00.7	+	56 52		15.2		

## MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
6824	- -	13.06 Sb	12.9 Sb	- -



FIELD No. 282  
 $20^{\text{h}}18^{\text{m}} + 54^{\circ}30'$   
 Survey Plate No. 543

GC STARS

Nos.	R.A.			Decl.	$m_p$
	h	m	s		
27899	20	04	13.3	+ 56 11 46	6.18
27912	20	04	54.8	+ 53 01 02	5.72
28258	20	17	10.7	+ 55 14 24	6.0
28410	20	23	11.5	+ 53 23 18	6.45
28531	20	28	12.2	+ 55 53 59	5.87
28667	20	33	23.0	+ 51 40 51	6.26

## CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1916.8 + 4855	medium compact	3755	73.7	Near	1 *

Average number of galaxies per cluster = 3755.0

\*) see special map on page 386

## GALAXIES

Position			NGC IC*	m <sub>p</sub>	V <sub>s</sub> km/sec	Remarks
α	1950	δ				
h	m	o				
20	00.7	+ 56 52		15.2		
20	01.6	+ 53 44		15.6		extremely diffuse spiral
20	20.3	+ 56 05		15.7		diffuse spiral

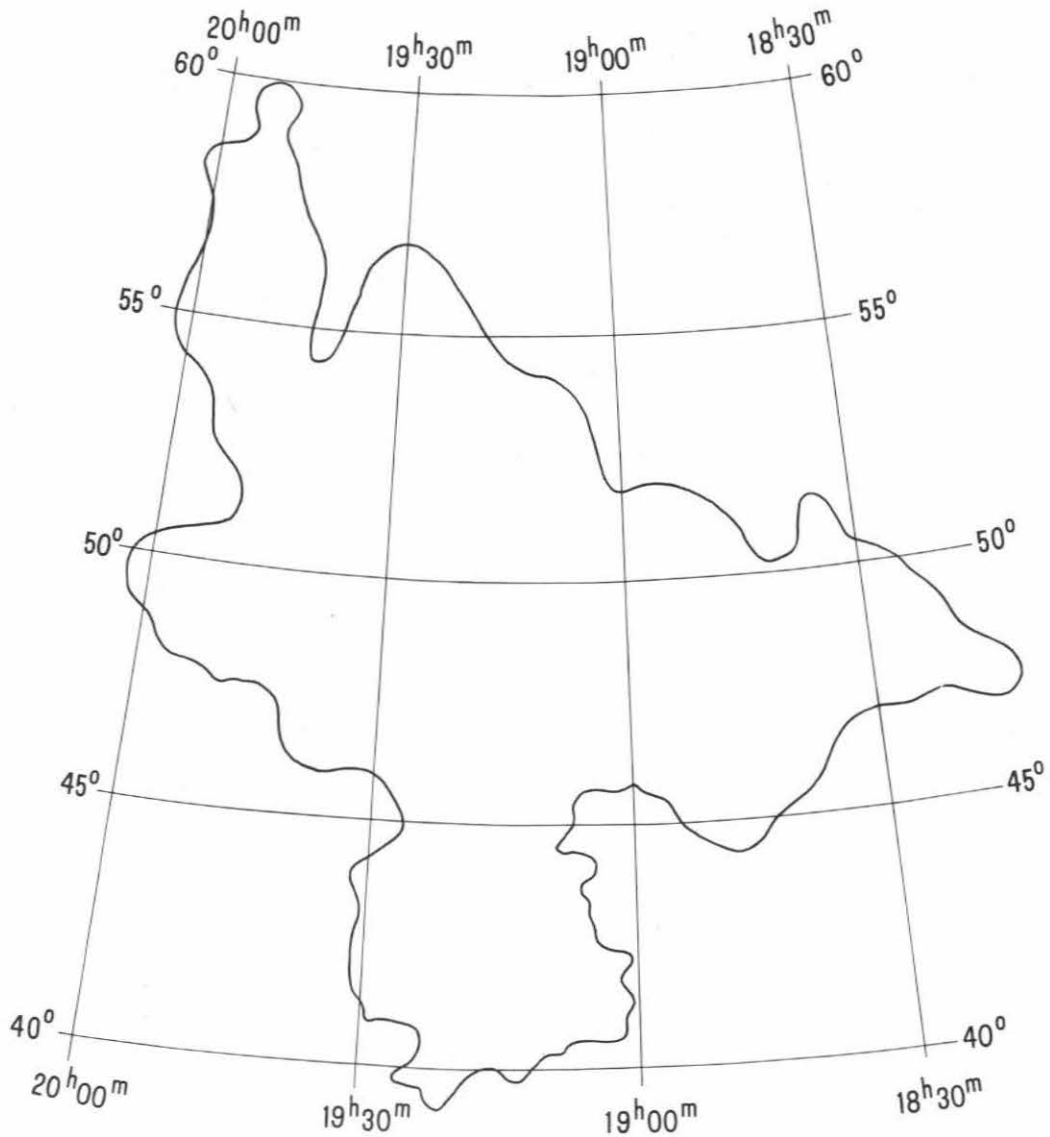
An area of about one square degree, near the SW corner of this field and outlined by

$$19^{\text{h}}59^{\text{m}} \leq \alpha \leq 20^{\text{h}}10^{\text{m}}, \quad 51^{\circ}00' \leq \delta \leq 51^{\circ}30'$$

is not covered by any of the neighboring fields. However, it contains neither clusters nor galaxies fit for inclusion in this catalogue.

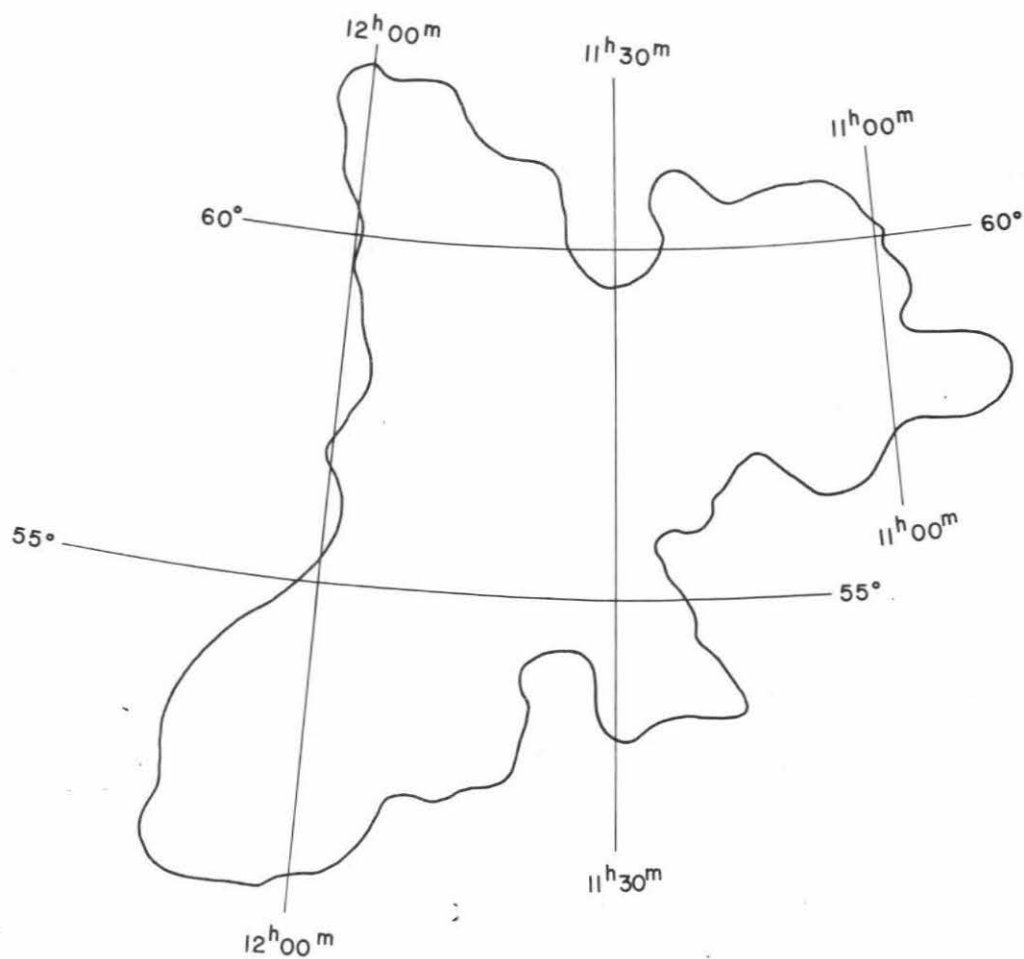
SPECIAL MAP OF CLUSTER 1916.8 + 4855

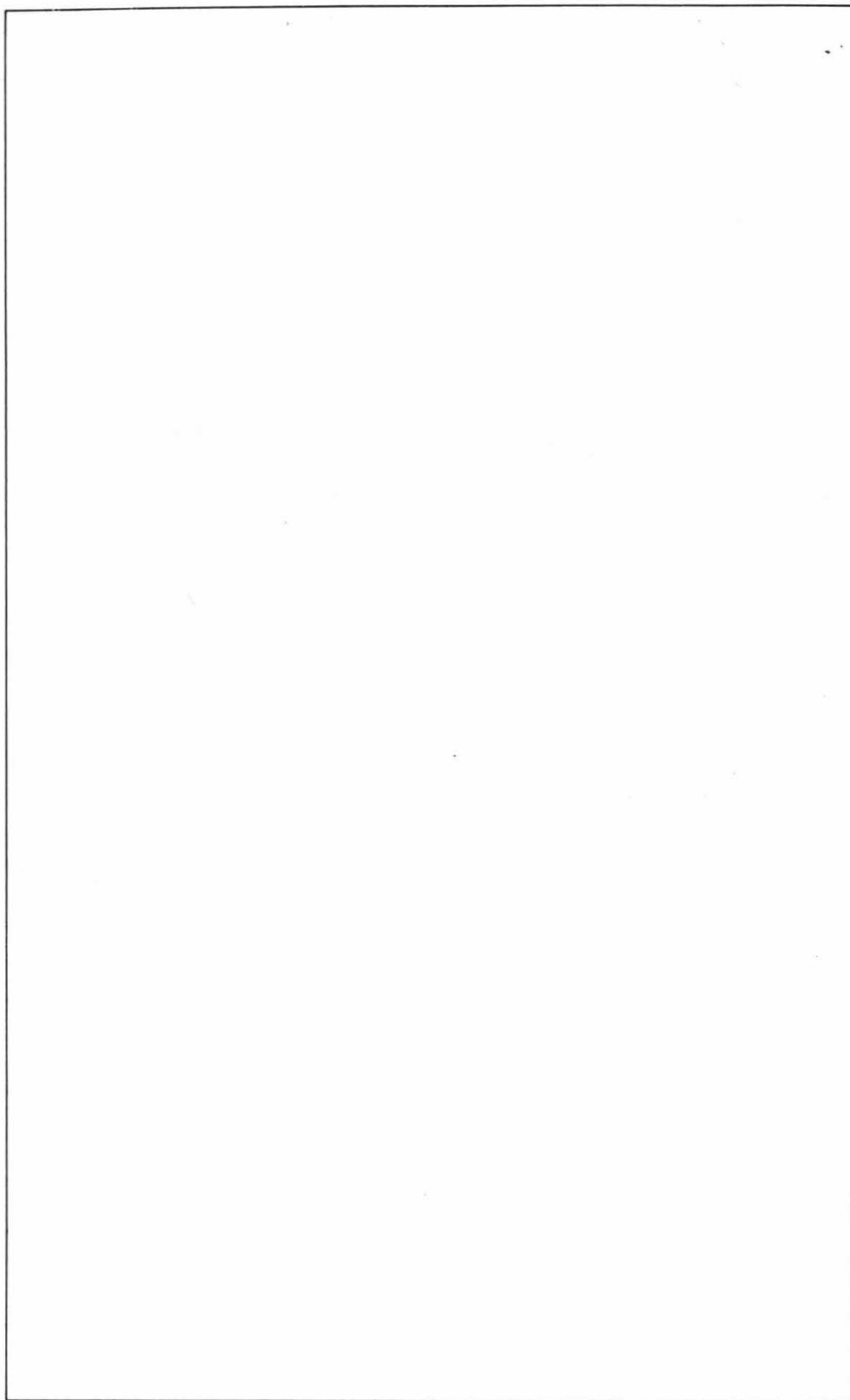
This cluster is No. 1 in FIELDS 228, 229, 230, 254, 255, 256, 257, 279, 280, 281, 282 of this volume and also in FIELD 303 of Volume IV.



SPECIAL MAP OF CLUSTER 1138.7 + 5650

This cluster is No. 11 in FIELD 268 and No. 5 in FIELD 269 of this volume;  
No. 5 in FIELD 291 and No. 2 in FIELD 292 of Volume IV.







# ERRORS AND OMISSIONS IN VOLUME I

Page 50: For galaxy  $12^{\text{h}}29^{\text{m}}.9 + 00^{\circ}40'$  add this remark: " $m_{\text{H}} = 13.0$ "

Page 54: For galaxy  $12^{\text{h}}52^{\text{m}}.6 + 00^{\circ}23'$  add this remark: " $m_{\text{H}} = 12.9$  S"

Page 54: For galaxy  $13^{\text{h}}01^{\text{m}}.9 - 03^{\circ}18'$  add " $V_{\text{s}} = +1350$ "

Page 67: For galaxy  $14^{\text{h}}15^{\text{m}}.7 + 01^{\circ}07'$  the IC number is 992\*, not 942\*

Page 118: For galaxies IC 563\* and IC 564\* add " $V_{\text{s}} = +6030$ " and " $V_{\text{s}} = +6110$ " respectively.

Page 131: For galaxy  $11^{\text{h}}01^{\text{m}}.8 + 05^{\circ}06'$  add "NGC No. 3509" and " $V_{\text{s}} = +7600$ "

FIELD No. 39: The following galaxy must be added:

" $\alpha = 11^{\text{h}}18^{\text{m}}.6$ ,  $\delta = +03^{\circ}28'$ , NGC 3641,  $m_{\text{p}} = 14.4$ , extremely compact"

An open circle should be placed on the map in the corresponding place.

FIELD No. 41: The following galaxy must be added:

" $\alpha = 12^{\text{h}}12^{\text{m}}.7$ ,  $\delta = +06^{\circ}02'$ ,  $m_{\text{p}} = 14.9$ ,  $V_{\text{s}} = +2039$ , very compact"

An open circle should be placed on the map in the corresponding place.

Page 149: For galaxy  $12^{\text{h}}16^{\text{m}}.6 + 04^{\circ}08'$  add: " $V_{\text{s}} = +1716$ "

Page 150: For galaxy  $12^{\text{h}}19^{\text{m}}.9 + 04^{\circ}50'$  add: "NGC 4301"

Page 150: For NGC 4339 add this remark: " $m_{\text{H}} = 12.6$  E"

Page 150: For NGC 4343 eliminate " $V_{\text{s}} = +714$ "

Page 150: For IC 3256\* add " $V_{\text{s}} = +714$ " and this remark: " $m_{\text{H}} = 12.8$  E, double system"

Page 150: For IC 3259\* change  $\alpha$  to read " $12^h 21^m.3$ "

Page 150: For IC 3267\* change  $\alpha$  to read " $12^h 21^m.6$ "

Page 150: For galaxy  $12^h 22^m.2 + 07^0 38'$  add: "NGC 4366"

Page 153: Add or change the following three lines:

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
4343	- -	- -	- -	13.22 Sa
3256*	- -	- -	- S0	13.48 E
3260*	- -	- -	- -	14.16 S0

Page 156: For galaxy  $12^h 52^m.3 + 02^0 55'$  add: "NGC 4810" and " $V_s = + 890$ "

Page 156: For galaxy  $12^h 52^m.3 + 02^0 56'$  add: "NGC 4809" and " $V_s = + 950$ "

Page 231: For galaxy  $9^h 52^m.8 + 08^0 37'$  add: " $V_s = + 1118$ "

Page 262: For NGC 4406 change sign of  $V_s$  to read " $V_s = - 333$ " and delete the designation "double nebula"

Page 262: For NGC 4410 add this remark: "double nebula"

Page 264: For galaxy  $12^h 30^m.0 + 09^0 26'$  add: " $V_s = + 1317$ "

Page 288: For galaxy  $14^h 30^m.3 + 10^0 06'$  add: "NGC 5669"

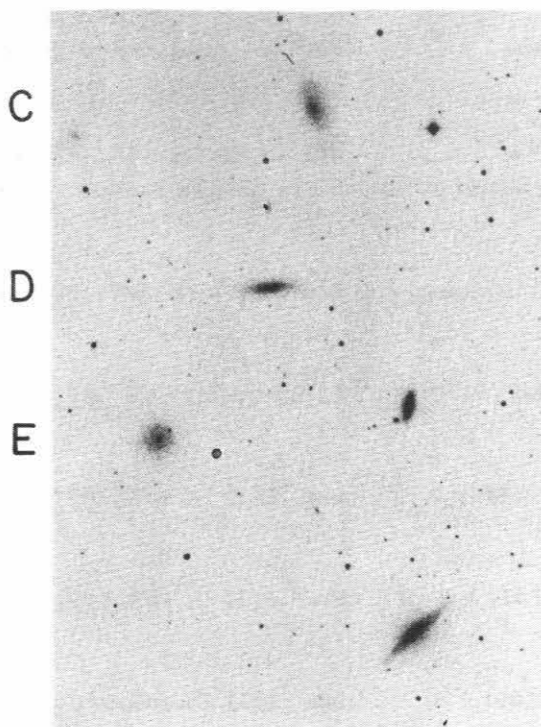
Page 302: For NGC 5970 add the remark: " $m_H = 12.4$  S"

Page 302: For NGC 5984 add the remark: " $m_H = 13.0$ "

Notice concerning the identifications of five galaxies in FIELD No. 42.

The five galaxies depicted on the accompanying photograph have given rise, in the past, to a considerable confusion concerning their proper identifications. It is recommended that in the future the following NGC/IC\* numbers be used exclusively:

A = 4343, B = 3256\*, C = 3259\*, D = 3260\*, E = 3267\*.



Furthermore, the numbers 4341 and 4342 should be dropped entirely since the existence of these objects is doubtful even to Dreyer himself, while on the 48-inch Survey Plates no trace of them has ever been found.

The corrections for pp. 150 and 153 are designed to bring this catalogue up to these standards. To facilitate handling of these objects, however, a list is given below of some prominent sources using identifications other than the ones

recommended above and disagreeing, in part, among themselves.

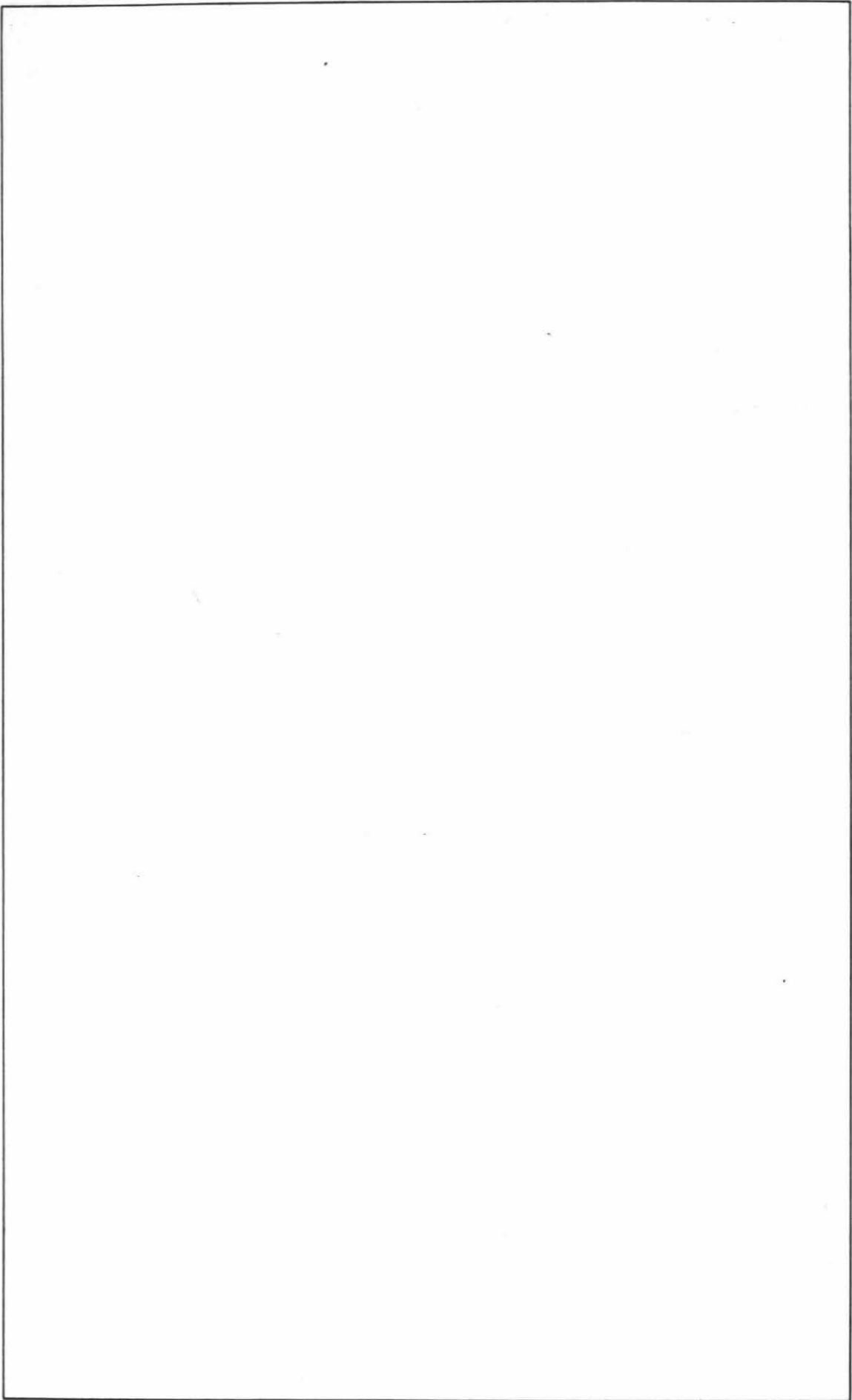
K. Reinmuth 1926 }  
E. Holmberg 1958 } A = 4341, B = 4342, D = 4343

G. and A. de Vaucouleurs 1964 }  
H. Shapley - A. Ames 1932 } B = 4342, D = 4341

M. L. Humason, N. U. Mayall, A. R. Sandage 1956: B = 4343

specifically:  $V_s$  + Type given belong to B, but the position given is that of A.

E. P. Hubble, personal files: B = 4341, and the small companion about 30" SE of B is numbered 4342.



# ERRORS AND OMISSIONS IN VOLUME II

Page 11: For cluster No. 8 change  $\alpha$  to read 0733.1 instead of 0377.1

Page 29: For galaxy  $9^{\text{h}}27^{\text{m}}.3 + 20^{\circ}17'$  change the IC number to read 2487\*  
instead of 2489\*

Page 61: For galaxy  $12^{\text{h}}04^{\text{m}}.6 + 17^{\circ}16'$  add: " $V_s = +6740^{\text{m}}$ "

Page 76: For galaxy  $13^{\text{h}}25^{\text{m}}.3 + 18^{\circ}02'$  change the NGC number to read 5158  
instead of 5188 and delete the remark " $m_H = 12.7 \text{ S}$ "

Page 90: For NGC 5600 add this remark: " $m_H = 12.4 \text{ S}$ "

Page 108: For galaxy  $15^{\text{h}}59^{\text{m}}.8 + 15^{\circ}50'$  add the IC number 1165\*

Page 109: For IC 1172\* add: " $V_s = +9936$ " and this remark: "= NGC 6044"

Page 109: For IC 1176\* add: " $V_s = +11658$ " and this remark: "= NGC 6056"

Page 109: For IC 1184\* add: " $V_s = +10038$ " and this remark: "= IC 1183\*"

Page 109: For galaxy  $16^{\text{h}}03^{\text{m}}.5 + 17^{\circ}29'$  add: "IC number 1186\*" and " $V_s = +11012$ "

Page 145: For NGC 2545 add this remark: " $m_H = 13.0$ "

Page 157: For NGC 2903 add this remark: " $m_H = 10.3 \text{ Sc}^{\text{h}}$ "

Page 170: For galaxy  $11^{\text{h}}07^{\text{m}}.1 + 24^{\circ}32'$  add: " $V_s = +6314$ "

Page 170: For galaxy  $11^{\text{h}}07^{\text{m}}.2 + 24^{\circ}31'$  add: " $V_s = +5996$ "

FIELD No. 126: The following galaxy must be added:

"11<sup>h</sup>10<sup>m</sup>.8 + 22<sup>o</sup>26',  $m_p = 13.2$ , resolved dwarf system \*) "

with the footnote reading: "\*)  $m_p = 12.85$  Holmberg"

A filled circle should be placed on the map in the corresponding place.

Page 193: For galaxy 12<sup>h</sup>57<sup>m</sup>.3 + 22<sup>o</sup>05' add IC number 841 \*

Page 193: For NGC 5012 add: " $m_H = 12.6$  Sc"

Page 194: For NGC 5016 add: " $m_H = 12.8$  S"

Page 224: For NGC 6052 add: " $m_H = 13.0$ "

Page 266: For NGC 2608 add: " $m_H = 12.9$  S"

Page 281: For NGC 3068 add: " $V_s = +6409, +6236$ "

Page 281: For galaxy 9<sup>h</sup>56<sup>m</sup>.4 + 30<sup>o</sup>59' change  $m_p$  to read 13.6 instead of 14.6  
and add footnote: "\*)  $m_p = 12.96$  Holmberg"

Page 302: For galaxy 12<sup>h</sup>13<sup>m</sup>.6 + 28<sup>o</sup>24' add: " $V_s = +6594$ "

Page 307: For Cluster No. 43 change  $\alpha$  to read 1249.5 instead of 1249.9

Page 314: For galaxy 12<sup>h</sup>55<sup>m</sup>.8 + 26<sup>o</sup>40' change identification to read "NGC 4849"  
instead of IC 838\* and add: " $V_s = +5823$ "

Page 324: For NGC 5116 add this remark: " $m_H = 12.9$  S"

Page 324: For galaxy 13<sup>h</sup>21<sup>m</sup>.4 + 31<sup>o</sup>50' add: "NGC 5127"

